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SUBCHAPTER C—REGULATIONS AND STANDARDS UNDER THE AGRICULTURAL MARKETING ACT OF 1946

PART 51—FRESH FRUITS, VEGETABLES AND OTHER PRODUCTS[1,2] (INSPECTION, CERTIFICATION, AND STANDARDS)

Subpart—Regulations

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51.60 Termination of contracts.
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[1] Among such other products are the following: Raw nuts, Christmas trees and evergreens; flowers and flower bulbs; and onion sets.

[2] None of the requirements in the regulations of this part shall excuse failure to comply with any Federal, State, county, or municipal laws applicable to products covered in the regulations in this part.

Subpart—United States Standards for Grades of Apples

GRADES

51.300 U.S. Extra Fancy.
51.301 U.S. Fancy.
51.302 U.S. No. 1.
51.303 U.S. Utility.
51.304 Combination grades.

COLOR REQUIREMENTS

51.305 Color requirements.

UNCLASSIFIED

51.306 Unclassified.

TOLERANCES

51.307 Tolerances.

APPLICATION OF TOLERANCES

51.308 Application of tolerances.

CALCULATION OF PERCENTAGES

51.309 Calculation of percentages.

CONDITION AFTER STORAGE OR TRANSIT

51.310 Condition after storage or transit.

PACKING REQUIREMENTS

51.311 Packing requirements.

MARKING REQUIREMENTS

51.312 Marking requirements.

DEFINITIONS

51.313 Mature.
51.314 Overripe.
51.315 Carefully hand-picked.
51.316 Clean.
51.317 Fairly well formed.
51.318 Injury.
51.319 Damage.
51.320 Serious damage.
51.321 Seriously deformed.
51.322 Diameter.

U.S. CONDITION STANDARDS FOR EXPORT

51.323 U.S. Condition Standards for Export.

Subpart—United States Standards for Grades of Apples for Processing

GRADES

51.340 U.S. No. 1.
51.341 U.S. No. 2.
51.342 U.S. Cider.

CULLS

51.343 Culls.

SIZE

51.344 Size.

APPLICATION OF STANDARDS

51.345 Application of standards.

TOLERANCES

51.346 Tolerances.

APPLICATION OF TOLERANCES

51.347 Application of tolerances.

DEFINITIONS

51.348 One variety.
51.349 Overripe.

Subpart—United States Standards for Grades of Cantaloups

GRADES

51.475 U.S. Fancy.
51.476 U.S. No. 1.
51.477 U.S. Commercial.
51.478 U.S. No. 2.

UNCLASSIFIED

51.479 Unclassified.

APPLICATION OF TOLERANCES

51.480 Application of tolerances.

DEFINITIONS

51.481 Very good internal quality.
51.482 Uniform in appearance.
51.483 One type.
51.484 Mature.
51.485 Good internal quality.
51.486 Soft.
51.487 Wilted.
51.488 Well formed.
51.489 Well netted.
51.490 Decay.
51.491 Wet slip.
51.492 Sunscald.
51.493 Damage.
51.494 Serious damage.
51.494a Permanent defects.
51.494b Fairly well netted.
51.494c Condition defects.

Subpart—United States Standards for Celery

GRADES

51.560 U.S. Extra No. 1.
51.561 U.S. No. 1.
51.562 U.S. No. 2.

UNCLASSIFIED

51.563 Unclassified.

COUNT

51.564 Requirements as to count.

APPLICATION OF TOLERANCES

51.565 Application of tolerances.

DEFINITIONS

51.566 Stalk.
51.567 Similar varietal characteristics.
51.568 Well developed.
51.569 Well formed.
51.570 Clean.
51.571 Well trimmed.
51.572 Compact.
51.573 Damage.
51.574 Green.
51.575 Fairly well blanched.
51.576 Mixed blanch.
51.577 Average midrib length.
51.578 Branch.
51.579 Length of stalk.
51.580 Fairly well developed.
51.581 Fairly well formed.
51.582 Fairly compact.
51.583 Reasonably well developed.
51.584 Reasonably well formed.
51.585 Fairly well trimmed.
51.586 Serious damage.
51.587 Diameter.
51.588 Length of seedstem.

Subpart—United States Consumer Standards for Celery Stalks

GENERAL

51.595 General.

GRADES

51.596 U.S. Grade AA.
51.597 U.S. Grade A.
51.598 U.S. Grade B.

BLANCHING; LENGTH OF STALKS

51.599 Blanching.
51.600 Length of stalks.

OFF-GRADE

51.601 Off-Grade celery.

DEFINITIONS

51.602 Stalk.
51.603 Similar varietal characteristics.
51.604 Well developed.
51.605 Good heart formation.
51.606 Clean.
51.607 Well trimmed.
51.608 Fairly compact.
51.609 Damage.
51.610 Midrib length.
51.611 Fairly well developed.
51.612 Fairly good heart formation.
51.613 Serious damage.

Subpart—United States Standards for Grades of Grapefruit (Texas and States other than Florida, California, and Arizona)

GRADES

51.620 U.S. Fancy.
51.621 U.S. No. 1.
51.622 U.S. No. 1 Bright.
51.623 U.S. No. 1 Bronze.
51.624 U.S. Combination.
51.625 U.S. No. 2.
51.626 U.S. No. 2 Russet.
51.627 U.S. No. 3.

TOLERANCES

51.628 Tolerances.

SAMPLE FOR GRADE OR SIZE DETERMINATION

51.629 Sample for grade or size determination.

STANDARD PACK

51.630 Standard pack.

DEFINITIONS

51.631 Mature.
51.632 Similar varietal characteristics.
51.633 Well colored.
51.634 Firm.
51.635 Well formed.
51.636 Smooth texture.
51.637 Injury.
51.638 Discoloration.
51.639 Fairly well colored.
51.640 Fairly well formed.
51.641 Fairly smooth texture.
51.642 Damage.
51.643 Fairly firm.
51.644 Slightly misshapen.
51.645 Slightly rough texture.
51.646 Serious damage.
51.647 Slightly colored.
51.648 Misshapen.
51.649 Slightly spongy.
51.650 Very serious damage.
51.651 Diameter.
51.652 Classification of defects.

METRIC CONVERSION TABLE

51.653 Metric conversion table.

Subpart—United States Standards for Grades of Oranges (Texas and States Other Than Florida, California, and Arizona)

GENERAL

51.680 General.

GRADES

51.681 U.S. Fancy.
51.682 U.S. No. 1.
51.683 U.S. No. 1 Bright.
51.684 U.S. No. 1 Bronze.
51.685 U.S. Combination.
51.686 U.S. No. 2.
51.687 U.S. No. 2 Russet.
51.688 U.S. No. 3.

TOLERANCES

51.689 Tolerances.

SAMPLE FOR GRADE OR SIZE DETERMINATION

51.690 Sample for grade or size determination.

STANDARD PACK

51.691 Standard pack for oranges except Temple variety.

STANDARD SIZING

51.692 Standard sizing.

DEFINITIONS

51.693 Mature.
51.694 Similar varietal characteristics.
51.695 Well colored.
51.696 Firm.
51.697 Well formed.
51.698 Smooth texture.
51.699 Injury.
51.700 Discloration.
51.701 Fairly smooth texture.
51.702 Damage.
51.703 Fairly well colored.
51.704 Reasonably well colored.
51.705 Fairly firm.
51.706 Slightly misshapen.
51.707 Slightly rough texture.
51.708 Serious damage.
51.709 Misshapen.
51.710 Slightly spongy.
51.711 Very serious damage.
51.712 Diameter.
51.713 Classification of defects.

METRIC CONVERSION TABLE

51.714 Metric conversion table.

Subpart—United States Standards for Grades of Florida Grapefruit

GRADES

51.750 U.S. Fancy.
51.751 U.S. No. 1 Bright.
51.752 U.S. No. 1.
51.753 U.S. No. 1 Golden.
51.754 U.S. No. 1 Bronze.
51.755 U.S. No. 1 Russet.
51.756 U.S. No. 2 Bright.
51.757 U.S. No. 2.
51.758 U.S. No. 2 Russet.
51.759 U.S. No. 3.

TOLERANCES

51.760 Tolerances.

APPLICATION OF TOLERANCES

51.761 Application of tolerances.

SIZE

51.762 Size.

DEFINITIONS

51.763 Similar varietal characteristics.
51.764 Well colored.
51.765 Firm.
51.766 Well formed.
51.767 Mature.
51.768 Smooth texture.
51.769 Injury.
51.770 Discoloration.
51.771 Fairly well colored.
51.772 Fairly smooth texture.
51.773 Damage.
51.774 Fairly firm.
51.775 Slightly misshapen.
51.776 Slightly rough texture.
51.777 Serious damage.
51.778 Slightly colored.
51.779 Poorly colored.
51.780 Misshapen.
51.781 Slightly spongy.
51.782 Very serious damage.
51.783 Diameter.
51.784 Classification of defects.

Subpart—United States Standards for Grades of Table Grapes (European or Vinifera Type)

GRADES

51.880 U.S. Extra Fancy Table.
51.881 U.S. Extra Fancy Export.
51.882 U.S. Fancy Table.
51.883 U.S. Fancy Export.
51.884 U.S. No. 1 Table.
51.885 U.S. No. 1 Institutional.

TOLERANCES

51.886 Tolerances.

APPLICATION OF TOLERANCES

51.887 Application of tolerances.

MATURITY REQUIREMENTS

51.888 Maturity requirements.

DEFINITIONS

51.889 Well developed grapes.
51.890 One variety.
51.891 Uniform in appearance.
51.892 Color terms.
51.893 Firm.
51.894 Weak.
51.895 Shriveled at capstem.
51.896 Shattered.
51.897 Wet.
51.898 Decay.
51.899 Waterberry.
51.900 Sunburn.
51.901 Damage.
51.902 Fairly well filled.
51.903 Excessively tight.
51.904 Shot berries.
51.905 Dried berries.
51.906 Well developed and strong.
51.907 Diameter.
51.908 Serious damage.
51.909 Materially shriveled at capstem.
51.910 Straggly.

51.911 Container.
51.912 Export.
51.913 Clusters.

METRIC CONVERSION TABLE

51.914 Metric conversion table.

Subpart—United States Standards for Persian (Tahiti) Limes

GRADES

51.1000 U.S. No. 1.
51.1001 U.S. Combination.
51.1002 U.S. No. 2.

UNCLASSIFIED

51.1003 Unclassified.

APPLICATION OF TOLERANCES

51.1004 Application of tolerances.

STANDARD PACK

51.1005 Standard pack.

DEFINITIONS

51.1006 Firm.
51.1007 Fairly well formed.
51.1008 Fairly smooth texture.
51.1009 Stylar end breakdown.
51.1010 Damage.
51.1011 Good green color.
51.1012 Fairly firm.
51.1013 Badly deformed.
51.1014 Excessively rough texture.
51.1015 Serious damage.
51.1016 Diameter.

Subpart—United States Standards for Grades of Florida Oranges and Tangelos

GENERAL

51.1140 General.

GRADES

51.1141 U.S. Fancy.
51.1142 U.S. No. 1 Bright.
51.1143 U.S. No. 1.
51.1144 U.S. No. 1 Golden.
51.1145 U.S. No. 1 Bronze.
51.1146 U.S. No. 1 Russet.
51.1147 U.S. No. 2 Bright.
51.1148 U.S. No. 2.
51.1149 U.S. No. 2 Russet.
51.1150 U.S. No. 3.

TOLERANCES

51.1151 Tolerances.

APPLICATION OF TOLERANCES

51.1152 Application of tolerances.

SIZE

51.1153 Size.

DEFINITIONS

51.1154 Similar varietal characteristics.
51.1155 Well colored.
51.1156 Firm.
51.1157 Well formed.
51.1158 Mature.
51.1159 Smooth texture.
51.1160 Injury.
51.1161 Discoloration.
51.1162 Fairly smooth texture.
51.1163 Damage.
51.1164 Fairly well colored.
51.1165 Reasonably well colored.
51.1166 Poorly colored.
51.1167 Fairly firm.
51.1168 Slightly misshapen.
51.1169 Slightly rough texture.
51.1170 Serious damage.
51.1171 Misshapen.
51.1172 Slightly spongy.
51.1173 Very serious damage.
51.1174 Diameter.
51.1175 Classification of defects.

STANDARDS FOR INTERNAL QUALITY OF COMMON SWEET ORANGES (CITRUS SINENSIS (L) OSBECK)

51.1176 U.S. Grade AA Juice (Double A).
51.1177 U.S. Grade A Juice.
51.1178 Maximum anhydrous citric acid permissible for corresponding total soluble solids.
51.1179 Method of juice extraction.

Subpart—United States Standards for Peaches

GRADES

51.1210 U.S. Fancy.
51.1211 U.S. Extra No. 1.
51.1212 U.S. No. 1.
51.1213 U.S. No. 2.

UNCLASSIFIED

51.1214 Unclassified.

APPLICATION OF TOLERANCES

51.1215 Application of tolerances to individual packages.

SIZE

51.1216 Size requirements.

STANDARD PACK

51.1217 Standard pack.

DEFINITIONS

51.1218 Mature.
51.1219 Well formed.
51.1220 Leaf or limb rub injury.
51.1221 Damage.
51.1222 Serious damage.
51.1223 Badly misshapen.

Subpart—United States Standards for Cleaned Virginia Type Peanuts in the Shell

GRADES

51.1235 U.S. Jumbo Hand Picked.
51.1236 U.S. Fancy Hand Picked.

UNCLASSIFIED

51.1237 Unclassified.

DEFINITIONS

51.1238 Mature.
51.1239 Pops.
51.1240 Paper ends.
51.1241 Damage.
51.1242 Count per pound.

Subpart—United States Standards for Summer and Fall Pears

GENERAL

51.1260 General.

GRADES

51.1261 U.S. No. 1.
51.1262 U.S. Combination.
51.1263 U.S. No. 2.

UNCLASSIFIED

51.1264 Unclassified.

TOLERANCES

51.1265 Tolerances.

APPLICATION OF TOLERANCES

51.1266 Application of tolerances.

BASIS FOR CALCULATING PERCENTAGES

51.1267 Basis for calculating percentages.

CONDITION AFTER STORAGE OR TRANSIT

51.1268 Condition after storage or transit.

STANDARD PACK

51.1269 Sizing.
51.1270 Packing.
51.1271 Tolerances for standard pack.

DEFINITIONS

51.1272 Mature.
51.1273 Overripe.
51.1274 Carefully hand-picked.
51.1275 Clean.
51.1276 Black end.
51.1277 Fairly well formed.
51.1278 Damage.
51.1279 Seriously misshapen.
51.1280 Serious damage.

Subpart—United States Standards for Winter Pears

GENERAL

51.1300 General.

GRADES

51.1301 U.S. Extra No. 1.
51.1302 U.S. No. 1.
51.1303 U.S. Combination.
51.1304 U.S. No. 2.

UNCLASSIFIED

51.1305 Unclassified.

TOLERANCES

51.1306 Tolerances.

APPLICATION OF TOLERANCES

51.1307 Application of tolerances.

BASIS FOR CALCULATING PERCENTAGES

51.1308 Basis for calculating percentages.

CONDITION AFTER STORAGE OR TRANSIT

51.1309 Condition after storage or transit.

STANDARD PACK

51.1310 Sizing.
51.1311 Packing.
51.1312 Tolerances for standard pack.

DEFINITIONS

51.1313 Mature.
51.1314 Overripe.
51.1315 Carefully hand-picked.
51.1316 Clean.
51.1317 Well formed.
51.1318 Black end.
51.1319 Injury.
51.1320 Fairly well formed.
51.1321 Damage.
51.1322 Seriously misshapen.
51.1323 Serious damage.

Subpart—United States Standards for Pears for Canning

GENERAL

51.1345 General.

GRADES

51.1346 U.S. No. 1.
51.1347 U.S. No. 2.

CULLS

51.1348 Culls.

SIZE

51.1349 Size.

APPLICATION OF STANDARDS

51.1350 Application of standards.

DEFINITIONS

51.1351 Mature.
51.1352 Handpicked.
51.1353 Firm.
51.1354 Well formed.
51.1355 Damage.
51.1356 Pears grown from late blooms.
51.1357 Seriously deformed.
51.1358 Serious damage.
51.1359 Diameter.

Subpart—United States Standards for Grades of Pecans in the Shell

GRADES

51.1400 U.S. No. 1.
51.1401 U.S. No. 2.

SIZE CLASSIFICATION

51.1402 Size classification.

KERNEL COLOR CLASSIFICATION

51.1403 Kernel color classification.

TOLERANCES

51.1404 Tolerances.

APPLICATION OF TOLERANCES

51.1405 Application of tolerances.

SAMPLE FOR GRADE OR SIZE DETERMINATION

51.1406 Sample for grade or size determination.

DEFINITIONS

51.1407 Fairly uniform in color.
51.1408 Loose extraneous or foreign material.
51.1409 Well developed.
51.1410 Fairly well developed.
51.1411 Poorly developed.
51.1412 Well cured.
51.1413 Damage.
51.1414 Serious damage.
51.1415 Inedible kernels.

OPTIONAL DETERMINATIONS

51.1416 Optional determinations.

Subpart—United States Standards for Grades of Shelled Pecans

GRADES

51.1430 U.S. No. 1 Halves.
51.1431 U.S. No. 1 Halves and Pieces.
51.1432 U.S. No. 1 Pieces.
51.1433 U.S. Commercial Halves.
51.1434 U.S. Commercial Halves and Pieces.
51.1435 U.S. Commerical Pieces.

COLOR CLASSIFICATIONS

51.1436 Color classifications.

SIZE CLASSIFICATIONS

51.1437 Size classifications for halves.
51.1438 Size classifications for pieces.

TOLERANCES FOR DEFECTS

51.1439 Tolerances for defects.

APPLICATION OF STANDARDS

51.1440 Application of standards.

DEFINITIONS

51.1441 Half-kernel.
51.1442 Piece.
51.1443 Particles and dust.
51.1444 Well dried.
51.1445 Fairly well developed.
51.1446 Poorly developed.
51.1447 Fairly uniform in color.
51.1448 Fairly uniform in size.
51.1449 Damage.
51.1450 Serious damage.

METRIC CONVERSION TABLE

51.1451 Metric conversion table.

Subpart—United States Standards for Grades of Fresh Plums and Prunes

GRADES

51.1520 U.S. Fancy.
51.1521 U.S. No. 1.
51.1522 U.S. Combination.
51.1523 U.S. No. 2.

UNCLASSIFIED

51.1524 Unclassified.

TOLERANCES

51.1525 Tolerances.

APPLICATION OF TOLERANCES

51.1526 Application of tolerances.

STANDARD PACK

51.1527 Standard pack.

DEFINITIONS

51.1528 Well formed.
51.1529 Clean.
51.1530 Mature.
51.1531 Sunscald.
51.1532 Damage.
51.1533 Well colored.
51.1534 Fairly well colored.
51.1535 Badly misshapen.
51.1536 Serious damage.
51.1537 Diameter.

METRIC CONVERSION TABLE

51.1538 Metric conversion table.

Subpart—United States Standards for Grades of Potatoes

GRADES

51.1540 U.S. Extra No. 1.
51.1541 U.S. No. 1.
51.1542 U.S. Commercial.
51.1543 U.S. No. 2.

UNCLASSIFIED

51.1544 Unclassified.

SIZE

51.1545 Size.

TOLERANCES

51.1546 Tolerances.

APPLICATION OF TOLERANCES

51.1547 Application of tolerances.

SAMPLES FOR GRADE AND SIZE DETERMINATION

51.1548 Samples for grade and size determination.

SKINNING

51.1549 Skinning.

DEFINITIONS

51.1550 Similar varietal characteristics.
51.1551 Firm.
51.1552 Clean.
51.1553 Fairly clean.
51.1554 Mature.
51.1555 Fairly well matured.
51.1556 Well shaped.
51.1557 Fairly well shaped.
51.1558 Seriously misshapen.
51.1559 Injury.
51.1560 Damage.
51.1561 Serious damage.
51.1562 Freezing.
51.1563 Soft rot or wet breakdown.
51.1564 External defects.
51.1565 Internal defects.

METRIC CONVERSION TABLE

51.1566 Metric conversion table.

Subpart—United States Consumer Standards for Potatoes

GRADES

51.1575 U.S. Grade A Small; U.S. Grade A Medium; U.S. Grade A Medium to Large; U.S. Grade A Large.
51.1576 U.S. Grade B Small; U.S. Grade B Medium; U.S. Grade B Medium to Large; U.S. Grade B Large.

SIZE

51.1577 Size range requirements.

OFF-GRADE

51.1578 Off-Grade potatoes.

APPLICATION OF TOLERANCES

51.1579 Application of tolerances to individual containers.

DEFINITIONS

51.1580 Fairly well shaped.
51.1581 Fairly clean.
51.1582 Soft rot or wet breakdown.
51.1583 Damage.
51.1584 Internal discoloration.
51.1585 Mature.
51.1586 Serious damage.
51.1587 Diameter.

Subpart—United States Standards for Grades of Florida Tangerines

GRADES

51.1810 U.S. Fancy.
51.1811 U.S. No. 1 Bright.
51.1812 U.S. No. 1.
51.1813 U.S. No. 1 Golden.
51.1814 U.S. No. 1 Bronze.
51.1815 U.S. No. 1 Russet.
51.1816 U.S. No. 2 Bright.
51.1817 U.S. No. 2.
51.1818 U.S. No. 2 Russet.
51.1819 U.S. No. 3.

TOLERANCES

51.1820 Tolerances.

APPLICATION OF TOLERANCES

51.1821 Application of tolerances.

SIZE

51.1822 Size.

DEFINITIONS

51.1823 Mature.
51.1824 Firm.
51.1825 Well formed.
51.1826 Damage.
51.1827 Highly colored.
51.1828 Discoloration.
51.1829 Well colored.
51.1830 Fairly well colored.
51.1831 Fairly firm.
51.1832 Fairly well formed.
51.1833 Serious damage.
51.1834 Reasonably well colored.
51.1835 Very serious damage.
51.1836 Diameter.
51.1837 Classification of defects.

Subpart—United States Standards for Fresh Tomatoes

GRADES

51.1855 U.S. No. 1.
51.1856 U.S. Combination.

51.1857 U.S. No. 2.
51.1858 U.S. No. 3.

SIZE

51.1859 Size.

COLOR CLASSIFICATION

51.1860 Color classification.

TOLERANCES

51.1861 Tolerances.

APPLICATION OF TOLERANCES

51.1862 Application of tolerances.

STANDARD WEIGHT

51.1863 Standard weight.

DEFINITIONS

51.1864 Similar varietal characteristics.
51.1865 Mature.
51.1866 Soft.
51.1867 Clean.
51.1868 Well developed.
51.1869 Fairly well formed.
51.1870 Fairly smooth.
51.1871 Damage.
51.1872 Reasonably well formed.
51.1873 Slightly rough.
51.1874 Serious damage.
51.1875 Misshapen.
51.1876 Very serious damage.
51.1877 Classification of defects.

Subpart—United States Consumer Standards for Fresh Tomatoes

GENERAL

51.1900 General.

GRADES

51.1901 U.S. Grade A.
51.1902 U.S. Grade B.

SIZE AND MATURITY CLASSIFICATIONS

51.1903 Size classification.
51.1904 Maturity classification.

OFF-GRADE

51.1905 Off-Grade tomatoes.

DEFINITIONS

51.1906 Similar varietal characteristics.
51.1907 Mature.
51.1908 Well developed.
51.1909 Fairly well formed.
51.1910 Fairly smooth.
51.1911 Damaged.
51.1912 Badly misshapen.
51.1913 Serious damage.

Subpart—United States Standards for Grades of Filberts in the Shell

GRADE

51.1995 U.S. No. 1.

APPLICATION OF STANDARDS

51.1996 Application of standards.

DEFINITIONS

51.1997 Similar type.
51.1998 Dry.
51.1999 Well formed.
51.2000 Clean and bright.
51.2001 Blank.
51.2002 Split shell.
51.2003 Damage.
51.2004 Reasonably well developed.
51.2005 Badly misshapen.
51.2006 Rancidity.
51.2007 Moldy.
51.2008 Insect injury.

METRIC CONVERSION TABLE

51.2009 Metric conversion table.

Subpart—United States Standards for Grades of Almonds in the Shell

GRADES

51.2075 U.S. No. 1.
51.2076 U.S. No. 1 Mixed.
51.2077 U.S. No. 2.
51.2078 U.S. No. 2 Mixed.

UNCLASSIFIED

51.2079 Unclassified.

APPLICATION OF TOLERANCES

51.2080 Application of tolerances.

DETERMINATION OF GRADE

51.2081 Determination of grade.

DEFINITIONS

51.2082 Similar varietal characteristics.
51.2083 Loose extraneous and foreign material.
51.2084 Clean.
51.2085 Fairly bright.
51.2086 Fairly uniform color.
51.2087 Well dried.
51.2088 Decay.
51.2089 Rancidity.
51.2090 Damage.
51.2091 Serious damage.
51.2092 Thickness.

Subpart—United States Standards for Grades of Shelled Almonds

GRADES

51.2105 U.S. Fancy.
51.2106 U.S. Extra No. 1.

51.2107 U.S. No. 1.
51.2108 U.S. Select Sheller Run.
51.2109 U.S. Standard Sheller Run.
51.2110 U.S. No. 1 Whole and Broken.
51.2111 U.S. No. 1 Pieces.

MIXED VARIETIES

51.2112 Mixed varieties.

UNCLASSIFIED

51.2113 Unclassified.

SIZE

51.2114 Size requirements.
51.2115 Tolerances for size.

APPLICATION OF TOLERANCES

51.2116 Application of tolerances.

DEFINITIONS

51.2117 Similar varietal characteristics.
51.2118 Whole.
51.2119 Clean.
51.2120 Well dried.
51.2121 Decay.
51.2122 Rancidity.
51.2123 Insect injury.
51.2124 Foreign material.
51.2125 Doubles.
51.2126 Split or broken kernels.
51.2127 Particles and dust.
51.2128 Injury.
51.2129 Damage.
51.2130 Serious damage.
51.2131 Diameter.
51.2132 Fairly uniform in size.

Subpart—United States Standards for Shelled English Walnuts (Juglans Regia)

GENERAL

51.2275 Application.
51.2276 Color chart.

GRADES

51.2277 U. S. No. 1.
51.2278 U. S. Commercial.

UNCLASSIFIED

51.2279 Unclassified.

TOLERANCES FOR GRADE DEFECTS

51.2280 Tolerances for grade defects.

COLOR REQUIREMENTS

51.2281 Color classifications.
51.2282 Tolerances for color.
51.2283 Off color.

SIZE REQUIREMENTS

51.2284 Size classification.
51.2285 Tolerances for size.

APPLICATION OF TOLERANCES

51.2286 Application of tolerances.

DEFINITIONS

51.2287 Well dried.
51.2288 Clean.
51.2289 Shell.
51.2290 Insect injury.
51.2291 Rancidity.
51.2292 Damage.
51.2293 Serious damage.
51.2294 Very serious damage.
51.2295 Half kernel.
51.2296 Three-fourths half kernel.

Subpart—United States Standards for Grades of Kiwifruit

51.2335 Grades.
51.2336 Tolerances.
51.2337 Application of tolerances.
51.2338 Standard pack.
51.2339 Definitions.
51.2340 Classification of defects.
51.2341 Sample size for grade determination.

Subpart—United States Standards for Grades of Pistachio Nuts in the Shell

51.2540 General.
51.2541 Grades.
51.2542 Tolerances.
51.2543 Application of tolerances.
51.2544 Size.
51.2545 Definitions.
51.2546 Average moisture content determination.
51.2547 Metric conversion table.

Subpart—United States Standards for Grades of Shelled Pistachio Nuts

51.2555 General.
51.2556 Grades.
51.2557 Tolerances.
51.2558 Application of tolerances.
51.2559 Size classifications.
51.2560 Definitions.
51.2561 Average moisture content.

Subpart—United States Standards for Grades for Sweet Cherries

GRADES

51.2646 U.S. No. 1.
51.2647 U.S. Commercial.

TOLERANCES

51.2648 Tolerances.

APPLICATION OF TOLERANCES

51.2649 Application of tolerances.

DEFINITIONS

51.2650 Similar varietal characteristics.

51.2651 Mature.
51.2652 Fairly well colored.
51.2653 Well formed.
51.2654 Clean.
51.2655 Damage.
51.2656 Diameter.
51.2657 Serious damage.
51.2658 Permanent defects.
51.2659 Condition defects.

METRIC CONVERSION TABLE

51.2660 Metric conversion table.

Subpart—United States Standards for Shelled Runner Type Peanuts

GRADES

51.2710 U.S. No. 1 Runner.
51.2711 U.S. Runner Splits.
51.2712 U. S. No. 2 Runner.

APPLICATION OF TOLERANCES

51.2713 Application of tolerances.

DEFINITIONS

51.2714 Similar vertical characteristics.
51.2715 Whole.
51.2716 Split.
51.2717 Broken.
51.2718 Foreign material.
51.2719 Unshelled.
51.2720 Minor defects.
51.2721 Damage.

Subpart—United States Standards for Grades of Shelled Spanish Type Peanuts

GRADES

51.2730 U.S. No. 1 Spanish.
51.2731 U.S. Spanish Splits.
51.2732 U.S. No. 2 Spanish.

APPLICATION OF TOLERANCES

51.2733 Application of tolerances.

DEFINITIONS

51.2734 Spanish type.
51.2735 Whole.
51.2736 Split.
51.2737 Broken.
51.2738 Foreign material.
51.2739 Damage.
51.2740 Minor defects.
51.2741 Unshelled.

Subpart—United States Standards for Shelled Virginia Type Peanuts

GRADES

51.2750 U.S. Extra Large Virginia.
51.2751 U.S. Medium Virginia.
51.2752 U.S. No. 1 Virginia.
51.2753 U.S. Virginia Splits.
51.2754 U.S. No. 2 Virginia.

APPLICATION OF TOLERANCES

51.2755 Application of tolerances.

DEFINITIONS

51.2756 Similar varietal characteristics.
51.2757 Whole.
51.2758 Split.
51.2759 Broken.
51.2760 Foreign material.
51.2761 Unshelled.
51.2762 Minor defects.
51.2763 Damage.

Subpart—United States Standards for Grades of Onions (Other Than Bermuda-Granex-Grano and Creole Types)

GRADES

51.2830 U.S. No. 1.
51.2831 U.S. Export No. 1.
51.2832 U.S. Commercial.
51.2833 U.S. No. 1 Boilers.
51.2834 U.S. No. 1 Picklers.
51.2835 U.S. No. 2.

SIZE CLASSIFICATIONS

51.2836 Size classifications.

TOLERANCES

51.2837 Tolerances.

SAMPLES FOR GRADE AND SIZE DETERMINATION

51.2838 Samples for grade and size determination.

APPLICATION OF TOLERANCES

51.2839 Application of tolerances.

EXPORT PACKING REQUIREMENTS

51.2840 Export packing requirements.

DEFINITIONS

51.2841 Mature.
51.2842 Dormant.
51.2843 Fairly firm.
51.2844 Fairly well shaped.
51.2845 Wet sunscald.
51.2846 Doubles.
51.2847 Bottlenecks.
51.2848 Scallions.
51.2849 Damage.
51.2850 Diameter.
51.2851 Badly misshapen.
51.2852 Serious damage.
51.2853 One type.

METRIC CONVERSION TABLE

51.2854 Metric conversion table.

Subpart—United States Standards for Grades of Apricots

GRADES

51.2925 U.S. No. 1.
51.2926 U.S. No. 2.

MARKING AND PACKING REQUIREMENTS

51.2927 Marking and packing requirements.

TOLERANCES

51.2928 Tolerances.

APPLICATION OF TOLERANCES

51.2929 Application of tolerances.

DEFINITIONS

51.2930 Mature.
51.2931 Well-formed.
51.2932 Damage.
51.2933 Serious damage.
51.2934 Diameter.

Subpart—United States Standards for Grades of Walnuts in the Shell

GENERAL

51.2945 Application.
51.2946 Color chart.
51.2947 Method of inspection.

GRADES

51.2948 U.S. No. 1.
51.2949 U.S. No. 2.
51.2950 U.S. No. 3.

UNCLASSIFIELD

51.2951 Unclassified.

SIZE SPECIFICATIONS

51.2952 Size specifications.

VARIETY OR TYPE SPECIFICATIONS

51.2953 Variety or type specifications.

TOLERANCES FOR GRADE DEFECTS

51.2954 Tolerances for grade defects.

APPLICATION OF TOLERANCES

51.2955 Application of tolerances.

DEFINITIONS

51.2956 Practically clean.
51.2957 Bright.
51.2958 Splits.
51.2959 Injury by discoloration.
51.2960 Damage.
51.2961 Well dried.
51.2962 Decay.
51.2963 Dark discoloration.
51.2964 Rancidity.
51.2965 Fairly clean.
51.2966 Serious damage.

Subpart—United States Standards for Florida Avocados

GRADES

51.3050 U.S. No. 1.
51.3051 U.S. Combination.
51.3052 U.S. No. 2.
51.3053 U.S. No. 3.

UNCLASSIFIED

51.3054 Unclassified.

STANDARD PACK

51.3055 Standard pack.

APPLICATION OF TOLERANCES

51.3056 Application of tolerances.

DEFINITIONS

51.3057 Similar varietal characteristics.
51.3058 Mature.
51.3059 Overripe.
51.3060 Well formed.
51.3061 Clean.
51.3062 Well colored.
51.3063 Well trimmed.
51.3064 Damage.
51.3065 Fairly well formed.
51.3066 Fairly well colored.
51.3067 Serious damage.
51.3068 Badly misshapen.
51.3069 Very serious damage.

Subpart—United States Standards for Grades of Nectarines

GRADES

51.3145 U.S. Fancy.
51.3146 U.S. Extra No. 1.
51.3147 U.S. No. 1.
51.3148 U.S. No. 2.

UNCLASSIFIED

51.3149 Unclassified.

TOLERANCES

51.3150 Tolerances.

APPLICATION OF TOLERANCES

51.3151 Application of tolerances.

STANDARD PACK

51.3152 Standard pack.

DEFINITIONS

51.3153 Mature.
51.3154 Well formed.
51.3155 Clean.
51.3156 Injury.
51.3157 Damage.
51.3158 Badly misshapen.
51.3159 Serious damage.

METRIC CONVERSION TABLE

51.3160 Metric conversion table.

Subpart—United States Standards for Grades of Bermuda-Granex-Grano Type Onions

GRADES

51.3195 U.S. No. 1.
51.3196 U.S. Combination.
51.3197 U.S. No. 2.

SIZE CLASSIFICATIONS

51.3198 Size classifications.

TOLERANCES

51.3199 Tolerances.

SAMPLES FOR GRADE AND SIZE DETERMINATION

51.3200 Samples for grade and size determination.

APPLICATION OF TOLERANCES

51.3201 Application of tolerances.

DEFINITIONS

51.3202 Similar varietal characteristics.
51.3203 Mature.
51.3204 Fairly firm.
51.3205 Fairly well shaped.
51.3206 Wet sunscald.
51.3207 Doubles.
51.3208 Bottlenecks.
51.3209 Damage.
51.3210 Serious damage.
51.3211 Diameter.

METRIC CONVERSION TABLE

51.3212 Metric conversion table.

Subpart—United States Standards for Grades of Potatoes for Processing

51.3410 Grades.
51.3411 Usable piece.
51.3412 Unusable material.
51.3413 Size.
51.3414 Application of standards.
51.3415 Definitions.
51.3416 Classification of defects.
51.3417 Optional test for specific gravity.
51.3418 Optional test for fry color.

Subpart—United States Standards for Grades of Honey Dew and Honey Ball Type Melons

GRADES

51.3740 U.S. No. 1.
51.3741 U.S. Commercial.
51.3742 U.S. No. 2.

UNCLASSIFIED

51.3743 Unclassified.

TOLERANCES

51.3744 Tolerances.

APPLICATION OF TOLERANCES

51.3745 Application of tolerances.

DEFINITIONS

51.3746 Mature.
51.3747 Well formed.
51.3748 Damage.
51.3749 Serious damage.

AUTHORITY: 7 U.S.C. 1621–1627.

Subpart—Regulations[1]

SOURCE: 32 FR 15066, Nov. 1, 1967, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

ADMINISTRATIVE

§51.1 Administration of regulations.

(a) The Administrator, Agricultural Marketing Service, U.S. Department of Agriculture, is charged with the administration of the regulations in this part, except at his discretion, he may delegate any or all such functions to any other officer or employee of the Agricultural Marketing Service of the Department.

(b) The conduct of all services and the hiring and licensing of inspection, grading and sampling personnel under these regulations shall be accomplished without discrimination as to race, color, religion, sex or national origin.

[39 FR 40937, Nov. 22, 1974. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

DEFINITIONS

§51.2 Terms defined.

Words in the regulations in this part in the singular form shall be deemed to import the plural, and vice versa, as the case may demand. For the purposes of the regulations in this part, unless

[1] None of the requirements in the regulations of this subpart shall excuse failure to comply with any Federal, State, county, or municipal laws applicable to products covered in the regulations of this subpart.

the context otherwise requires, the following terms shall have the following meanings:

(a) *Act.* ''Act'' means the applicable provisions of the Agricultural Marketing Act of 1946 (60 Stat. 1087 et seq.) as amended; (7 U.S.C. 1621 et seq.) or any other act of Congress conferring like authority.

(b) *Administrator.* ''Administrator'' means the Administrator of Agricultural Marketing Service.

(c) *Applicant.* ''Applicant'' means any interested party who has applied for inspection service under the regulations in this part.

(d) *Carlot.* ''Carlot''means any number of containers which contain a product of the same kind located on or unloaded from the same conveyance and available for inspection at the same time and location: *Provided,* That:

(1) Product of the same carlot shall be considered to be separate lots whenever the product differs markedly as to quality and/or condition, and such differences are definitely associated with certain brands, varieties, sizes or container markings;

(2) If the applicant requests more than one inspection certificate covering portions of the same carlot, the quantity of the carlot covered by each certificate shall be considered to be a separate carlot;

(3) If product of the same carlot is packed in more than one size or type container, each such size or type shall be considered to be a separate lot.

(e) *Carlot equivalent.* ''Carlot equivalent'' shall be the quantity of an individual product customarily loaded in common highway trailers.

(f) *Condition.* (1) ''Condition'' means the relative degree of soundness of a product which may affect its merchantability and includes those factors which are subject to change and may result from, but not necessarily limited to, age, improper handling, storage or lack of refrigeration.

(2) Examples of condition factors include maturity or stage of ripeness; state of freshness, such as crispness, tenderness, or toughness; wilting; shriveling or flabbiness; mechanical injuries resulting from improper handling after packing; progressive pathological, physiological, and virus diseases, including fungal and bacterial roots; and freezing damage which may occur in transit or storage; or any other factor which may occur, develop, or progress in the marketing channels.

(g) *Agricultural Marketing Service.* ''Agricultural Marketing Service'' means the Agricultural Marketing Service of the Department.

(h) *Department.* ''Department'' means the U.S. Department of Agriculture.

(i) *Federal-State Inspection Agency.* ''Federal-State Inspection Agency'' means any State agency, business association or trade organization, private firm, or other person or corporation with which the Department has entered into a cooperative agreement for inspection service.

(j) *Grade.* ''Grade'' means a class or rank of quality.

(k) *Inspector.* ''Inspector'' means any employee of the Department authorized by the Secretary or any other person licensed by the Secretary, to investigate, sample, inspect, and certify, in accordance with the regulations in this part, to any interested party the quality, quantity and/or condition of any fresh product covered in this part, and to perform related duties in connection with the inspection service.

(l) *Inspection service.* ''Inspection service'' means:

(1) The Service established and conducted under the regulations in this part for the determination and certification or other identification as to the grade, the quality and/or condition of fresh fruits or vegetables and related products including the condition of container.

(2) Performance by an inspector of any related services such as reporting the temperatures of loads or lots of fresh products.

(3) To observe conditions under which a product is being packed, to observe plant sanitation as a prerequisite to inspection of the packed product either on a continuous or periodic basis, or checkload the inspected product in connection with the marketing of the product.

(4) The issuance of inspection certificates or reports relating to paragraphs (j)(1), (2), and (3) of this section.

(m) *Interested party.* ''Interested party'' means any person who has a financial interest in the product for which inspection is requested.

(n) *Person.* ''Person'' means any individual, partnership, association, business trust, corporation, any organized group of persons (whether incorporated or not), the United States (including, but not limited to, any corporate agencies thereof), and any State, county, or municipal government, any common carrier, and any authorized agent of any of the foregoing.

(o) *Packing plant.* ''Packing plant'' means the premises, buildings, structures, and equipment including but not limited to, machines, utensils, fixtures, employed or used with respect to preparation and packing the product.

(p) *Quality.* ''Quality'' means the combination of the inherent properties or attributes of a product which determines its relative degree of excellence.

(q) *Regulations.* ''Regulations'' means the regulations in this subpart.

(r) *Sample.* ''Sample'' means any number of sample units to be used for inspection.

(s) *Sample unit.* ''Sample unit'' means a container and/or its entire contents, a portion of the contents of a container or other unit of a commodity, or a composite mixture of a commodity to be used for inspection.

(t) *Sampling.* ''Sampling'' means the act of selecting samples of a commodity for the purpose of inspection under the regulations in this part.

(u) *Secretary.* ''Secretary'' means the Secretary of Agriculture of the United States or any officer or employee of the Agricultural Marketing Service to whom authority has heretofore been delegated, or to whom authority may hereafter be delegated, to act in his stead.

[32 FR 15066, Nov. 1, 1967. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981; 56 FR 55799, Oct. 30, 1991]

§51.3 Designation of official certificates, memoranda, marks, other identifications and devices for purposes of the Agricultural Marketing Act.

Subsection 203(h) of the Agricultural Marketing Act of 1946, as amended by Pub. L. 272, 84th Congress, provides criminal penalties for various specified offenses relating to official certificates, memoranda, marks or other identifications, and devices for making such marks or identifications, issued or authorized under section 203 of said act, and certain misrepresentations concerning the inspection or grading of agricultural products under said section. For the purpose of said subsection and the provisions in this part, the terms listed below shall have the respective meanings specified:

(a) *Inspection certificate.* ''Inspection certificate'' means any form of certification, either written or printed, used under this part to certify with respect to the inspection, identification, class, grade, quality, size, quantity, or condition of products (including the compliance of products with applicable specifications).

(b) *Official memorandum.* ''Official memorandum'' means any initial record of findings made by an authorized person in the process of grading, inspecting, or sampling pursuant to this part, any processing or plant-operation report made by an authorized person in connection with grading, inspecting, or sampling under this part, and any report made by an authorized person of services performed pursuant to this part.

(c) *Official mark.* ''Official mark'' means the grade mark, inspection mark, combined form of inspection and grade mark, and any other mark, or any variations in such marks, including those prescribed in §51.49, approved by the Administrator and authorized to be affixed to any product, or affixed to or printed on the packaging material of any product, stating that the product was graded or inspected, or both, or indicating the appropriate U.S. grade or condition of the product, or for the purpose of maintaining the identity of products graded or inspected, or both, under this part.

(d) *Official identification.* ''Official identification'' means any United States (U.S.) standard designation of class, grade, quality, size, quantity, or condition specified in this part or any symbol, stamp, label or seal indicating that the product has been graded or inspected and/or indicating the class,

grade, quality, size, quantity, or condition of the product approved by the Administrator and authorized to be affixed to any product, or affixed to or printed on the packaging material of any product.

(e) *Official device.* ''Official device'' means a stamping appliance, branding device, stencil, printed label, or any other mechanically or manually operated tool that is approved by the Administrator for the purpose of applying any official mark or other identification to any product or the packaging material thereof; or any device approved and designated by the Administrator as a USDA official device for use as a color standard, defect guide, or other similar aid to interpret the U.S. Department of Agriculture grade standards and to facilitate conduct of the Inspection Service.

INSPECTION SERVICE

§ 51.4 Where inspection service is offered.

Products will be inspected at appropriate points indicated in paragraphs (a), (b), and (c) of this section whenever inspectors are available.

(a) *Shipping points.* Inspection service is available in all areas covered by cooperative agreements entered into on behalf of the Department with Cooperating Federal-State Inspection Agencies providing for this inspection work pursuant to authority contained in any Act of Congress, or may be provided in any other area which is not covered by a cooperative agreement if the Administrator determines that it is practicable to provide inspection service.

(b) *Destination markets.* Inspection is available in all central markets in which an inspection office is located.

(c) *Other destination points.* Inspection may be made at any point which may be conveniently reached from any terminal market in which an inspection office is located to the extent inspection personnel is available.

(d) *Addresses of offices.* Any prospective applicant may obtain an up-to-date list of inspection offices by addressing an inquiry to Fresh Products Standardization and Inspection Branch, Fruit and Vegetable Division, Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C. 20250.

§ 51.5 Who may obtain inspection service.

An application for inspection service may be made by any interested party including, but not limited to, the United States and any instrumentality or agency thereof, any State, county, municipality, or common carrier, and any authorized agent in behalf of the foregoing.

§ 51.6 How to make application.

An application for inspection service may be filed in an office of inspection at any market referred to in § 51.4 (b), (c), or (d) or with any inspector. It may be made in writing, orally, by telegraph, or by telephone. If made orally or by telephone, the inspector may require that it be confirmed by applicant in writing or by telegraph. An application may be made for one or more lots, or it may be in the nature of a blanket application for inspection of all designated lots of a given commodity within a particular period, or for all designated lots loaded or received at a specified point.

§ 51.7 Form of application.

Each application for inspection service shall state (a) the name and address of the applicant and the name and capacity of the person, if any, making the application in his behalf; (b) the name and address of the shipper; (c) the kind and quantity of the products involved; (d) the interest of the applicant therein; (e) the identification of the products by (1) grade, brand, or other marks, if practicable, (2) car number of carrier or number of truck or name of boat, if practicable, and (3) the name and location of the store, warehouse, or other place where the products are located; (f) the particular quality or condition concerning which inspection is requested, to which may be added the time and place at which it is desired that the inspection be made; (g) when the lot is to be inspected in a receiving market, the name and address of the receiver; (h) the name of the shipping point and of the destination, when known; and (i) such other information as may be necessary for identification

of the product, or as may be required by the inspector or the Administrator.

§51.8 Filing of application.

An application shall be regarded as filed only when made at the office of inspection nearest the place where the commodity is located. A record showing the date and time of filing shall be made and kept in such office.

§51.9 When application may be rejected.

An application may be rejected by the inspector in charge of the appropriate office of inspection if the applicant objects to the inspector cutting an adequate number of specimens to determine the interior quality or condition of the product to be inspected, or for failure of the applicant (a) to observe the regulations of this part, (b) to furnish necessary information or to make the commodity reasonably available or accessible for inspection, (c) to pay for previous inspection services rendered, or (d) when it appears that to perform the inspection and certification service would not be to the best interest of the Government. Such applicant shall be notified promptly of the reason for such rejection.

§51.10 When application may be withdrawn.

An application may be withdrawn by the applicant at any time before the inspection is performed: *Provided,* That the applicant shall pay any travel expenses, telephone, telegraph, or other expenses which have been incurred by the Inspection Service in connection with such application.

§51.11 Authority to request inspection.

Proof of the interest of an applicant in the product involved, or of the authority of any person applying for inspection in behalf of another may be required, at the discretion of the inspector.

§51.12 Accessibility of products.

The applicant shall cause the products for which inspection is requested to be made reasonably accessible for sampling or inspection and to be so placed as to disclose their quality or condition. Samples of the products drawn for examination shall be inspected only under such conditions as, in the opinion of the inspector, will permit a true and correct determination to be made of their quality or condition.

§51.13 Basis of service.

Inspection and certification service for quality and/or condition shall be based upon the appropriate standards promulgated by the U.S. Department of Agriculture, applicable standards prescribed by the laws of the State where the particular product was produced, specifications of any governmental agency, written buyer and seller contract specifications, or any written specification by an applicant which is approved by the Administrator: *Provided,* That if such product is regulated pursuant to the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601 *et seq.*), or the comparable laws of any State, such inspection and certification shall be on the basis of the standards, if any, prescribed in, or pursuant to, the marketing order and/or agreement effective thereunder.

§51.14 Order of inspection service.

Inspection service shall be performed, insofar as practicable, in the order of which applications are received, except that precedence shall be given (a) to the inspection of lots involved in complaints filed pursuant to the Perishable Agricultural Commodities Act, 1930 (U.S.C. 449a et seq.), and (b) to appeal inspections. Precedence may also be given to applications made on behalf of the Federal or State Government.

§51.15 Financial interest of inspector.

No inspector shall inspect any product in which he is directly or indirectly financially interested.

§51.16 Postponing inspection service.

If the inspector has reason to believe that, because of latent defects due to climatic or other conditions, he is unable to determine the true quality or condition of the product, he shall postpone examination for such period as may, in his judgment, be reasonably necessary to enable him to determine

its true quality or condition. Inspection shall also be postponed by the inspector, unless otherwise directed by the applicant, if in his judgment examination of the product when exposed to low temperatures may result in damage to the product.

§ 51.17 Official sampling.

Samples may be officially drawn by any duly authorized inspector and delivered, or shipped, for analysis and certification to the nearest designated market or to such market as shall be directed by the Administrator. The container in which such samples are delivered, or shipped, shall contain a statement, signed by the inspector who drew the samples, showing the time and place of the sampling and the brands or other identifying marks of the containers from which the samples were drawn. The certificate based on such samples shall show the time and place of drawing the samples, and the name of the inspector by whom they were drawn.

§ 51.18 Certificate forms.

Certificates shall be issued on forms approved by the Administrator.

§ 51.19 Issuance of certificates.

(a) A separate certificate shall be issued for each lot inspected, except that when an application covers more than one lot a single certificate may be issued to cover all such lots. The person signing and issuing the certificate shall be one of the following:

(1) The inspector who performed the inspection;

(2) Another employee of the Inspection Service who has been given power of attorney by the inspector and authorized by the Administrator to affix the inspector's signature to an inspection certificate;

(3) Another employee of the Inspection Service who has been authorized by the Administrator to act in a supervisory capacity;

(4) With the approval of the administrator, the signature of the person performing the inspection or that of an employee of the Inspection Service who has been authorized to act in a supervisory capacity may be affixed by computer to an official certificate.

Provided, That in all cases the inspection certificate shall be prepared in accordance with the official memoranda of the inspector or inspectors who performed the inspection: *And provided further,* That whenever a certificate issued is signed by a person given power of attorney by the inspector, that person's signature must appear along with the name of the inspector.

(b) When the inspection is made for the purpose of determining whether food products for use by the applicant comply with contract specifications therefor, a formal certificate need not be issued, but the fact of such compliance or noncompliance may be indicated by affixing an appropriate stamp or mark on such products or the containers thereof, at the discretion of the inspector.

[35 FR 13571, Aug. 26, 1970. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981; 51 FR 8478, Mar. 12, 1986]

§ 51.20 Issuance of corrected certificates.

A corrected inspection certificate may be issued by the inspector who issued the original certificate after distribution of a certificate if errors, such as incorrect dates, grade statements, lot or car numbers, identification marks, types of containers, sizes, weights, quantities, or errors in any other pertinent information require the issuance of a corrected certificate. Whenever a corrected certificate is issued, such certificate shall supersede the inspection certificate which was issued in error and the superseded certificate shall become null and void after the issuance of the corrected certificate.

§ 51.21 Disposition of inspection certificates.

(a) The original certificate, and not to exceed four copies (if requested by applicant prior to issuance), shall be delivered or mailed promptly to the applicant or to a person designated by him. One copy shall be filed in the office of the inspector when the inspection is made by a Federal Government employee, otherwise, it shall be filed in the appropriate office of the cooperating Federal-State Inspection Agency.

Unless otherwise directed by the Administrator, two copies of each official certificate issued on products received in destination markets shall be forwarded to the Administrator to be kept on file in Washington and no copies of official certificates issued at shipping point need be so forwarded. In the case of any product covered by a marketing agreement and/or order effective pursuant to the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601 *et seq.*), at least one copy of each certificate covering the inspection of such product shall, on request, be delivered to the administrative agency established thereunder, subject to such terms and conditions as the Administrator may prescribe. Copies may be furnished to other interested parties as outlined in §51.41.

§51.22 Disposition of samples.

If it is necessary to take samples of the product to the inspection office for further examination, the inspector, after completion of inspection of such samples shall dispose of them or any usable portion as follows: (a) Ascertain from the applicant if the owner wants the samples returned to him at his expense, (b) if he does not want them returned at his expense, give them to a nonsectarian charitable organization or, (c) if they have a substantial monetary value, sell them and remit the proceeds to the Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C. 20250, or if applicable, to the cooperating State Agency. Such proceeds shall be deposited to the credit of the Inspection Trust Fund, Federal or cooperating agency, whichever is applicable.

§51.23 Report of inspection results prior to issuance of formal report.

Upon request of an applicant, all or any part of the contents of a certificate covering an inspection requested by him may be telegraphed or telephoned to him, or to any person designated by him, at his expense. If the application for such information is received after the certificate has been issued, it will be considered as an application for an extra copy of the certificate, and the fees prescribed in §51.41 shall apply.

APPEAL INSPECTION

§51.24 When appeal inspection may be requested.

An application for appeal inspection may be made by any financially interested person who is dissatisfied with the results of an inspection as stated in an inspection certificate, if the lot can be positively identified by the Inspection Service as the lot which was previously inspected.

§51.25 Where to file for an appeal inspection and information required.

An appeal inspection may be obtained by the applicant, or other person financially interested in the product, by filing a request (a) with the Inspection Office nearest the point where the product is located, or (b) with the inspector who made the original inspection, or (c) with any district supervisory inspection office, or (d) with the Administrator. The application for the appeal inspection shall state the reasons therefor, and shall be accompanied by a copy of any previous inspection certificate or inspection report, and any other information which the applicant received regarding the quality or condition of the product at the time of the original inspection. Such application may be made orally (in person or by telephone), in writing, or by telegraph. If made orally, written confirmation shall be made promptly.

§51.26 Record of filing time.

A record showing the date and time of filing an application for appeal inspection shall be made promptly by the receiving office.

§51.27 When appeal inspection may be refused.

An application for an appeal inspection may be refused if: (a) The reasons for the appeal inspection are frivolous or not substantial; (b) the quality or condition of the product has undergone a material change since the inspection covering the product on which the appeal inspection is requested; (c) the lot in question is not, or cannot be, made accessible for the inspection; (d) the lot relative to which appeal inspection is requested cannot be identified positively by the inspector as the lot which

was previously inspected; or (e) there is noncompliance with the regulations in this part. Such an applicant shall be notified promptly of the reason for refusal.

§ 51.28 When an application for an appeal inspection may be withdrawn.

An application for appeal inspection may be withdrawn by the applicant at any time before the appeal inspection is performed: *Provided,* That the applicant shall pay any travel expenses, telephone, telegraph or other expenses which have been incurred by the Inspection Service in connection with such application.

§ 51.29 Order in which made.

Appeal inspections shall be made, as soon as practicable, following the time requested by the applicant and in the order in which applications are received. They shall take precedence over all other pending applications, except applications for inspections covering lots involved in complaints filed pursuant to the Perishable Agricultural Commodities Act, 1930 as amended (7 U.S.C. 499a *et seq.*).

§ 51.30 Who shall perform appeal inspections.

Appeal inspections shall be performed by an inspector or inspectors authorized for this purpose by the Administrator and whenever practical, such appeal inspections shall be made by two inspectors.

§ 51.31 Appeal inspection certificate.

After an appeal inspection has been completed, an appeal inspection certificate shall be issued showing the results of such appeal inspection; and such certificate shall supersede the inspection certificate previously issued for the product involved. Each appeal inspection certificate shall clearly identify the number and date of the inspection certificate which it supersedes. The superseded certificate shall become null and void upon the issuance of the appeal inspection certificate and shall no longer represent the quality described therein. The inspector or inspectors issuing an appeal inspection certificate shall sign the certificate and forward notice of such issuance to such persons as considered necessary to prevent misuse of the superseded certificate if the original and all copies of such superseded certificate have not previously been delivered to the inspector or inspectors issuing the appeal inspection certificate. The provisions in the regulations in this part concerning forms of certificates and issuance of certificates, shall apply to appeal inspection certificates, except that copies of such appeal inspection certificates shall be furnished all interested parties who receive copies of the superseded certificate.

LICENSING OF INSPECTORS

§ 51.32 Who may be licensed.

Persons who are employed by a cooperative Federal-State Inspection Agency and possess adequate qualifications, as determined by such examinations as the Administrator may consider to be appropriate, may be licensed as inspectors of products which may be inspected under the regulations in this part. Such license shall bear the printed signature of the Secretary and shall be countersigned by an authorized employee of the Department. A licensed inspector shall perform his duties pursuant to the regulations in this subpart as directed by the Administrator.

§ 51.33 Application to become a licensed inspector.

Application to become a licensed inspector shall be made to the Administrator on forms furnished for that purpose. Each such application shall be filled in and signed by the applicant in his own handwriting, and the application shall contain or be accompanied by:

(a) A statement of present address, age, height, and weight of the applicant;

(b) A statement showing education and present and previous occupations, together with names of all employers for whom he has worked with periods of service, during the last 5 years previous to the date of his application;

(c) A statement by the applicant that he agrees to comply with all terms and conditions of the regulations in this part relating to the duties of inspectors; and

(d) Such other information as may be required by the Administrator.

§51.34 Suspension or revocation of license of a licensed inspector.

Pending final action by the Secretary, the Administrator may, whenever he deems such action necessary, suspend the license of any licensed inspector issued pursuant to the regulations in this part by giving notice of such suspension to the respective licensee, accompanied by a statement of the reasons therefor. Within 10 days after the receipt of the aforesaid notice and statement of the reasons by such licensee, he may file an appeal, in writing, with the Secretary, supported by any argument or evidence that he may wish to offer as to why his license should not be suspended or revoked. After the expiration of the aforesaid 10-day period and consideration of such argument and evidence, the Secretary will take such action as he deems appropriate with respect to such suspension or revocation. When no appeal is filed within the prescribed 10 days, the license shall be automatically revoked.

§51.35 Surrender of license.

Upon termination of his services as a licensed inspector, or suspension or revocation of his license, a licensee shall surrender his license immediately to the office of inspection serving the area in which he is located. These same provisions shall apply in case of an expired license.

§51.36 Expiration and renewal of license.

An inspector's license issued pursuant to the regulations in this subpart shall expire on December 31 of each year in which it is issued. The license of an inspector may be renewed by the issuance of a new license and the renewal shall subject the inspector to the terms and conditions of the regulations of this subpart.

[37 FR 11313, June 7, 1972. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

SCHEDULE OF FEES AND CHARGES AT DESTINATION MARKETS

§51.37 Charges for fees, rates, and expenses.

For each carlot of product inspected, a fee or rate determined in accordance with §§51.38 and 51.39, and expenses determined in accordance with §51.40, shall be paid by the applicant.

[56 FR 55800, Oct. 30, 1991]

§51.38 Basis for fees and rates.

(a) When performing inspections of product unloaded directly from land or air transportation, the charges shall be determined on the following basis:

(1) For products in quantities of 51 or more packages:

(i) Quality and condition inspection of 1 to 4 products unloaded from the same conveyance:

(A) $78 for over a half carlot equivalent of an individual product.

(B) $65 for a half carlot equivalent or less of an individual product.

(C) $13 for each additional lot of the same product.

(ii) Condition only inspection of 1 to 4 products unloaded from the same conveyance:

(A) $65 for over a half carlot equivalent of an individual product.

(B) $60 for a half carlot equivalent or less of an individual product.

(C) $13 for each additional lot of the same product.

(iii) Quality and condition inspection and/or condition only inspection of 5 or more products unloaded from the same conveyance:

(A) $277 for the first 5 products.

(B) $39 for each additional product.

(C) $13 for each additional lot of any of the same product.

(2) For quality and condition inspection and/or condition only inspection of products in quantities of 50 or less packages unloaded from the same conveyance:

(i) $39 for each individual product.

(ii) $13 for each additional lot of any of the same product.

(b) When performing inspections of palletized products unloaded directly from sea transportation or when palletized product is first offered for

inspection before being transported from the dock-side facility, charges shall be determined on the following basis:

(1) For each package inspected according to the following rates:

(i) 1 cent per package weighing less than 15 pounds;

(ii) 2 cents per package weighing 15 to 29 pounds; and,

(iii) 3 cents per package weighing 30 or more pounds.

(2) $13 for each additional lot of any of the same product.

(3) A minimum charge of $78 for each product inspected.

(c) When performing inspections of products from sea containers unloaded directly from sea transportation or when palletized products unloaded directly from sea transportation are not offered for inspection at dockside, the car-lot fees in § 51.38(a) shall apply.

(d) When performing inspections for Government agencies, or for purposes other than those prescribed in the preceding paragraphs, including weight-only and freezing-only inspections, fees for inspection shall be based on the time consumed by the grader in connection with such inspections, computed at a rate of $39 an hour: Provided, that:

(1) Charges for time shall be rounded to the nearest half hour;

(2) The minimum fee shall be two hours for weight-only inspections, and one-half hour for other inspections;

(3) When weight certification is provided in addition to quality and/or condition inspection, a one-hour charge shall be added to the carlot fee.

(4) When inspections are performed to certify product compliance for Defense Personnel Support Centers, the daily or weekly charge shall be determined by multiplying the total hours consumed to conduct inspections by the hourly rate. The daily or weekly charge shall be prorated among applicants by multiplying the daily or weekly charge by the percentage of product passed and/or failed for each applicant during that day or week. Waiting time and overtime charges shall be charged directly to the applicant responsible for their incurrence.

(e) When performing inspections at the request of the applicant during periods which are outside the grader's regularly scheduled work week, a charge for overtime or holiday work shall be made at the rate of $19.50 per hour or portion thereof in addition to the carlot equivalent fee, package charge, or hourly charge specified in this subpart. Overtime or holiday charges for time shall be rounded to the nearest half hour.

(f) When an inspection is delayed because product is not available or readily accessible, a charge for waiting time shall be made at the prevailing hourly rate in addition to the carlot equivalent fee, package charge, or hourly charge specified in this subpart. Waiting time shall be rounded to the nearest half hour.

[61 FR 54083, Oct. 17, 1996]

§ 51.39 Fees for appeal inspections.

The fee to be charged to an applicant, including any Government agency, for appeal inspections on all products shall be at the same rate as those set forth in this part, except that when a material error is found in the determination of the original inspection, no fee will be charged.

[56 FR 55800, Oct. 30, 1991]

§ 51.40 Traveling and other expenses.

Costs including travel incurred by the Agricultural Marketing Service in providing inspection service or appeal inspections may be charged to the applicant, including any Government agency. These charges shall be included with the fee for inspection on the bill furnished the applicant.

[56 FR 55800, Oct. 30, 1991]

§ 51.41 Fees for additional copies of inspection certificates.

Additional copies of any inspection certificate other than those copies provided for in § 51.21, or copies of official memoranda, may be mailed, faxed, or otherwise provided to any interested party upon payment of a fee of $5.00 for each copy.

[56 FR 55800, Oct. 30, 1991]

§51.42 Charges for inspection services on a contract basis.

Irrespective of fees and charges prescribed in the foregoing sections, the Administrator may enter into contracts with applicants to perform inspection services pursuant to the regulations in this part and other requirements as prescribed by the Administrator in such contract, and the charges for such inspection services provided for in such contracts shall be on such basis as will reimburse the Agricultural Marketing Service of the Department for the full cost of conducting such inspection service, including an appropriate overhead charge to cover as nearly as practicable administrative overhead expenses, as may be determined by the Administrator.

§51.43 How fees shall be paid.

Fees shall be paid by the applicant in accordance with the directions on the fee bill furnished him by the billing office, and in advance, if required by the inspector.

§51.44 Disposition of fees.

(a) The fees collected for services rendered shall be disposed of as follows:

(1) Fees for inspections made by inspectors acting exclusively for the Agricultural Marketing Service shall be remitted promptly to the Agricultural Marketing Service.

(2) Fees for inspections made by an inspector acting under a cooperative agreement with a State or other organization shall be disposed of in accordance with the terms of such agreement. Such portion of the fees collected under a cooperative agreement with a State or other cooperating bodies as may be due the United States shall be remitted to the Agricultural Marketing Service.

(b) Fees and charges collected pursuant to §§51.40 to 51.41 shall be remitted to the Agricultural Marketing Service.

(c) Fees and charges collected pursuant to §51.42 shall be disposed of in accordance with the terms of the contract.

SCHEDULE OF FEES AND CHARGES AT SHIPPING POINT AREAS

§51.45 Fees and charges at shipping point areas.

Fees for inspection performed under cooperative agreements pursuant to authority contained in any Act of Congress shall be those provided by such agreements.

MISCELLANEOUS

§51.46 Denial of inspection service.

Any or all benefits of the act may be denied any person for any of the following reasons: (a) Any willful misrepresentation or deceptive or fraudulent practice made or committed by any person in connection with the making or filing of an application for inspection service; (b) any fradulent or unauthorized use, alteration, or imitation of any certificate issued pursuant to the regulations in this subpart; (c) any interference with or obstruction of any inspector or official sampler in the performance of his duties, by intimidation, threat, assault or any other improper means; or (d) any willful violation of the regulations in this subpart may be deemed sufficient cause for debarring the person found guilty thereof from any or all benefits of the acts, after notice and opportunity for hearing has been accorded him. The Rules of Practice Governing Formal Adjudicatory Proceedings Instituted by the Secretary Under Various Statutes set forth in §§1.130 through 1.151 of this title and the Supplemental Rules of Practice in part 50 of this chapter shall govern proceedings conducted pursuant to this section.

[32 FR 15066, Nov. 1, 1967. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 60 FR 8464, Feb. 14, 1995]

§51.47 Political activity.

All inspectors are forbidden, during the period of their respective appointments or while holding a valid inspectors' license to take an active part in political campaigns and a violation by a licensee shall constitute grounds for revocation of his license. All Federal

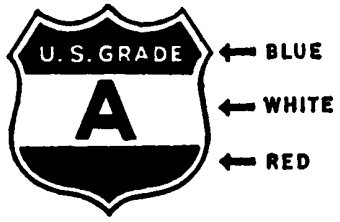
employees are subject to the applicable provisions of the Department's administrative regulations relating to political activity.

§ 51.48 Inspector's identification.

Each inspector shall have in his possession at all times, and present upon request, while on duty, the means of identification furnished by the Department to such person.

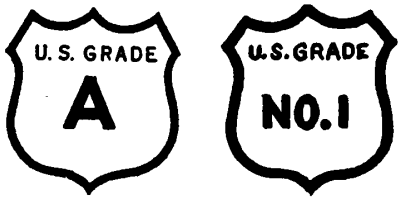
§ 51.49 Approved identifications.

(a) *Grade marks.* The approved shield mark with the appropriate U.S. grade designation may be used on containers, labels or otherwise indicated on the package when: (1) The product has been packed under continuous inspection as provided by the Inspection Service, (2) the plant in which the product is packed is maintained under good commercial sanitary practices, and (3) the product has been certified by an inspector as meeting the requirements of U.S. Grade A, U.S. Grade No. 1, or a higher U.S. grade as shown within the shield. The shields with approved grade designation for use shall be similar in form and design to the examples in figures 1 and 2 of this section.



Shield using red, white and blue background

FIGURE 1



Shields with plain background.

FIGURE 2

(b) *Inspection legends.* The approved continuous inspection legends may be used on containers, labels or otherwise indicated on the package when: (1) The product has been packed under continuous inspection provided by the Inspection Service, (2) the plant in which the product is packed is maintained under good commercial sanitary practices, and (3) the product meets the requirements of such quality, grade, or specification as may be approved by the Administrator. The continuous inspection legends approved for use shall be similar in form and design to the examples in figures 3 and 4.

PACKED UNDER
CONTINUOUS
INSPECTION
OF THE
U. S. DEPT. OF
AGRICULTURE

FIGURE 3

PACKED BY

UNDER CONTINUOUS
FEDERAL-STATE
INSPECTION

FIGURE 4

(c) *Combined grade and inspection legends.* The grade marks set forth in paragraph (a) of this section and illustrated by figures 1 and 2 of this section and the inspection legends set forth in paragraph (b) of this section and illustrated by figures 3 and 4 of paragraph (b) of this section may be combined

into a consolidated grade and inspection legend for use on products which meet the requirements of both of these paragraphs. See figure 5.

PACKED BY

UNDER CONTINUOUS
FEDERAL-STATE
INSPECTION

FIGURE 5

(d) *Packer identification.* The packer's name and address or assigned code number or other mark identifying the packer as may be approved by the Administrator, shall appear on any container bearing grade marks or inspection legends approved under paragraph (a), (b), or (c) of this section, as illustrated by the example in figure 6.

PACKER NO. 01
PACKED UNDER CONTINUOUS
FEDERAL - STATE INSPECTION

FIGURE 6

(e) *Other identification marks.* Products may be inspected on a lot inspection basis as provided in this part and identified by an official inspection mark similar in form and design to figure 7 of this paragraph. The use of this mark or other comparable identification marks may be required by the Administrator whenever he determines that such identification is necessary in order to maintain the identity of lots which have been inspected and certified.

U S DEPT OF AGRICULTURE
INSPECTED
DEC 18 1972
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FIGURE 7

[38 FR 7448, Mar. 22, 1973. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§51.50 Custody of official inspection marking devices.

All official inspection marking devices as shown in figure 6 of §51.49 shall be kept in the custody of the Agricultural Marketing Service and accurate records shall be kept of these devices. Each inspection office shall keep a record of the devices assigned to it. Such devices shall be distributed only to authorized employees of the Department who shall keep the devices in their official possession or control at all times and keep complete records of such devices.

§51.51 Prohibited uses of approved identification.

No label or advertising material used on, or in conjunction with any product, shall bear a brand name, trademark, product name or any other descriptive material that incorporates, resembles, simulates, or alludes to any official U.S. Department of Agriculture grade mark, grade statement, continuous inspection legend, sampling mark or

sampling statement, or combination of one or more thereof.

§ 51.52 Licensing and identification of certain official devices.

The Administrator may issue licenses permitting the manufacture, identification, distribution, and sale of any official device designated as a USDA color standard, defect guide or other similar aid under such terms and conditions as may be specified by the Administrator. Licenses shall be available to all persons meeting conditions prescribed by the Administrator, shall be nonexclusive, and shall be revocable for cause. No person shall manufacture, identify, distribute or sell any such official device except at the direction of or under license from the Administrator. Such official devices may be marked, tagged or otherwise designated with the prefix ''USDA'' together with other identifying words or symbols, as prescribed by the license.

REQUIREMENTS FOR PLANTS OPERATING UNDER CONTINUOUS INSPECTION ON A CONTRACT BASIS

§ 51.53 Continuous inspections.

Continuous inspection service which is associated with the use of the approved shield showing the U.S. grade, the approved continuous inspection legend, or both, on the container may be furnished whenever inspectors are available, the facilities and conditions are satisfactory for the conduct of the service, and there is a signed contract between the applicant and the Department or a cooperative Federal-State Inspection Agency in which it is agreed that such service will be conducted subject to regulations governing the inspection and certification of fresh fruits, vegetables, and other products, contained in this part and any additional and supplemental instructions issued by the Department or such instructions issued by a cooperating agency which are not inconsistent with those issued by the Department.

§ 51.54 Plant survey.

Prior to the inauguration of continuous Federal or Federal-State Inspection Service on a contract basis, the Administrator will make or cause to be made a survey and inspection where such service is to be performed to determine whether the premises, plant and facilities are suitable and adequate for the performance of such service in accordance with the regulations in this part, including, but not limited to requirements contained in §§ 51.54 through 51.59.

§ 51.55 Premises.

The premises shall be free from conditions objectionable to packing operations, including, but not limited to litter, waste and refuse within the immediate vicinity of the plant buildings, excessively dusty roads, yards or parking lots, and poorly drained areas.

§ 51.56 Buildings and structures.

The packing plant buildings shall be properly constructed and maintained in a sanitary condition, including, but not limited to the following requirements:

(a) There shall be sufficient light consistent with the use to which the particular portion of the building is devoted and to permit efficient cleaning. The grading belts and bins shall be provided with sufficient proper nonglaring light to insure adequacy of grading and inspection operations;

(b) If the product is washed there shall be ample supply of water of a safe and sanitary quality with adequate facilities for its distribution throughout the plant and washing machinery;

(c) There shall also be an efficient waste disposal and plumbing system maintained in good repair;

(d) Each room in which the product is graded or stored shall be designed and constructed as to insure operating conditions of a clean and orderly character and shall be maintained in a clean and sanitary manner; and,

(e) Every practical precaution shall be taken to exclude dogs, cats, rodents and other vermin from the rooms in which the products are to be graded or stored.

§ 51.57 Facilities.

Each packing plant shall be equipped with adequate sanitary facilities and accommodations, including but not being limited to the following:

(a) There shall be a sufficient number of adequately lighted toilet rooms, ample in size and conveniently located. Toilet rooms shall be adequately screened and equipped with self-closing doors, and shall have independent outside ventilation;

(b) Adequate lavatory accommodations and supplies shall be placed at such locations in or near toilet rooms as to insure the cleanliness of each person who grades or handles the product to be inspected; and

(c) Suitable facilities for cleaning shall be provided at convenient locations in the plant.

§51.58 Equipment.

All equipment used for receiving, washing, grading, packaging or storing shall be of such design, material and construction that it may be kept clean.

§51.59 Operations and operating procedures.

(a) The inspector shall refuse to permit the use of the official shield with grade mark or continuous inspection legend on packages if the produce is from a field or orchard having a disease or other condition which may not be apparent on individual specimens at packing time but which may cause the product to materially decrease in quality after packing.

(b) All products which are certified shall be subjected to continuous inspection throughout the packing operations.

(c) The inspectors are available for consultation purposes but shall not become involved in plant operations.

(d) The Inspection Service will not be responsible for damages occurring through any act of commission or omission on the part of its inspectors when engaged in rendering continuous inspection service; for packing errors or misbranding of products; or for failure to supply enough inspectors during any period of service provided under the contract.

(e) The applicant for continuous inspection shall:

(1) Conform to all applicable regulations under which the continuous inspection service is conducted.

(2) Use only raw material which has been handled or stored under conditions which insures its suitability for packing; maintain the plant designated herein in such sanitary condition and to employ such methods of handling raw materials for packing as may be necessary to conform to the sanitary requirements prescribed in this part.

(3) Not permit any of his marks or labels or buyers' and distributors' marks or labels applied by him on which reference is made to continuous inspection to be used on any product not packed under this continuous inspection service; or permit any of his marks or labels or buyers' and distributors' marks or labels applied by him on which reference is made to any U.S. Grade to be used on any product which does not meet the requirements of such grade; or to supply labels bearing reference to continuous inspection service to another plant unless the products to which such labels are to be applied have been packed under continuous inspection.

(4) Furnish any reports of packaging and output of products inspected, as may be requested by the inspection agencies.

(5) Make available to inspectors adequate office space in the designated plant and furnish suitable desks and office equipment for the proper care of inspection records.

(6) Make his laboratory or other facilities and necessary equipment available for the use of inspectors in making inspection of samples.

(7) Furnish if required, such stenographic and clerical assistance as may be necessary in the typing of certificates and reports and the handling of official correspondence, as well as the labor incident to drawing of samples and facilitating adequate inspection procedure when necessary.

(8) Submit to the Chief of the Fresh Products Standardization and Inspection Branch, Fruit and Vegetable Division, Agricultural Marketing Service, for approval prior to printing, drawings or printers' proofs of each packer's or distributor's label bearing or referring in any manner to official inspection legends or grade marks.

(9) Not make deceptive, fraudulent, or unauthorized use in his advertising, or otherwise, of the continuous inspection service, the inspection certificates

or reports issued, or the containers on which the shield of the Department is identified, in connection with the sale of any of the packaged products; and to submit to the Agricultural Marketing Service through the inspector assigned to the plant or other representative of the Inspection Service, for approval to use any proposed advertising in which reference is made to the Inspection Service.

[32 FR 15066, Nov. 1, 1967, as amended at 38 FR 7448, Mar. 22, 1973. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.60 Termination of contracts.

In case the applicant wishes to terminate the contract he agrees either to continue the service until all unused containers, labels and advertising material on hand or in the possession of his supplier bearing the Department shield, or reference to continuous inspection service have been used, or to destroy such containers, labels and advertising material, or to obliterate the Department shield and all other reference to the continuous inspection service on said containers, labels, and advertising material, or otherwise furnish assurance satisfactory to the Agricultural Marketing Service that such containers, labels and advertising material will not be used in violation of the terms and conditions of this agreement. In case the continuous inspection service is terminated for cause by the Agricultural Marketing Service, the applicant agrees to destroy all unused containers, labels and advertising material on hand bearing the Department shield, or reference to continuous inspection service, or to obliterate the Department shield, and all reference to the continuous inspection service on said containers, labels and advertising material or otherwise furnish assurance satisfactory to the Agricultural Marketing Service that such containers, labels and advertising material will not be used in violation of the terms and conditions of the agreement.

§ 51.61 Congressional interest in contracts.

No member of, or delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of any contract provided for in the regulations in this subpart or to any benefit that may arise therefrom, but this provision shall not be construed to extend to such contract if made with a corporation for its general benefit, and shall not extend to any benefits that may accrue from the contract to a member of, or delegate to Congress, or a Resident Commissioner in his capacity as a farmer.

§ 51.62 OMB control numbers assigned pursuant to the Paperwork Reduction Act.

The information collection requirements contained in this part have been approved by the Office of Management and Budget (OMB) under the provisions of 44 U.S.C. Chapter 35 and have been assigned OMB Control No. 0581–0125.

(44 U.S.C. Chap. 35)

[49 FR 23826, June 8, 1984]

Subpart—United States Standards for Grades of Apples[1]

SOURCE: 29 FR 10573, July 30, 1964, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.300 U.S. Extra Fancy.

''U.S. Extra Fancy'' consists of apples of one variety which are mature but not overripe, carefully hand-picked, clean, fairly well formed; free from decay, internal browning, internal breakdown, scald, scab, bitter pit, Jonathan spot, freezing injury, visible water core, and broken skins and bruises except those which are slight and incident to proper handling and packing. The apples are also free from injury caused by smooth net-like russeting, sunburn or sprayburn, limb rubs, hail, drought spots, scars, disease, insects, or other means; and free from damage by smooth solid, slightly rough or rough russeting, or stem or calyx cracks, and free from damage by

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

invisible water core after January 31st of the year following the year of production. Each apple of this grade has the amount of color specified in §51.305 for the variety. (See §§51.305 and 51.307.)

§51.301 U.S. Fancy.

''U.S. Fancy'' consists of apples of one variety which are mature but not overripe, carefully hand-picked, clean, fairly well formed; free from decay, internal browning, internal breakdown, bitter pit, Jonathan spot, scald, freezing injury, visible water core, and broken skins and bruises except those which are incident to proper handling and packing. The apples are also free from damage caused by russeting, sunburn or sprayburn, limb rubs, hail, drought spots, scars, stem or calyx cracks, disease, insects, invisible water core after January 31st of the year following the year of production, or damage by other means. Each apple of this grade has the amount of color specified in §51.305 for the variety. (See §§51.305 and 51.307.)

§51.302 U.S. No. 1.

The requirements of this grade are the same as for U.S. Fancy except for color, russeting, and invisible water core. In this grade less color is required for all varieties with the exception of the yellow and green varieties other than Golden Delicious. Apples of this grade are free from excessive damage caused by russeting which means that apples meet the russeting requirements for U.S. Fancy as defined under the definitions of ''damage by russeting'', except the aggregate area of an apple which may be covered by smooth netlike russeting shall not exceed 25 percent; and the aggregate area of an apple which may be covered by smooth solid russeting shall not exceed 10 percent: *Provided,* That in the case of the Yellow Newtown or similar varieties the aggregate area of an apple which may be covered with smooth solid russeting shall not exceed 20 percent. Each apple of this grade has the amount of color specified in §51.305 for the variety. There is no requirement in this grade pertaining to invisible water core. (See §§51.305 and 51.307.)

(a) *U.S. No. 1 Early.* ''U.S. No. 1 Early'' consists of apples which meet the requirements of U.S. No. 1 grade except as to color and maturity, and meet a minimum size requirement. Apples of this grade have no color requirements, need not be mature, and are not less than 2 inches in diameter. This grade is provided for varieties such as Duchess, Gravenstein, Red June, Twenty Ounce, Wealthy, Williams, Yellow Transparent, and Lodi, or other varieties which are normally marketed during the summer months. (See §51.307.)

(b) *U.S. No. 1 Hail.* ''U.S. No. 1 Hail'' consists of apples which meet the requirements of U.S. No. 1 grade except that hail marks where the skin has not been broken, and well healed hail marks where the skin has been broken, are permitted: *Provided,* The apples are fairly well formed. (See §§51.305 and 51.307.)

§51.303 U.S. Utility.

''U.S. Utility'' consists of apples of one variety which are mature but not overripe, carefully hand-picked, not seriously deformed; free from decay, internal browning, internal breakdown, scald, and freezing injury. The apples are also free from serious damage caused by dirt or other foreign matter, broken skins, bruises, russeting, sunburn or sprayburn, limb rubs, hail, drought spots, scars, stem or calyx cracks, visible water core, disease, insects, or other means. (See §51.307.)

§51.304 Combination grades.

(a) Combinations of the above grades may be used as follows:

(1) Combination U.S. Extra Fancy and U.S. Fancy;

(2) Combination U.S. Fancy and U.S. No. 1;

(3) Combination U.S. No. 1 and U.S. Utility.

(b) Combinations other than these are not permitted in connection with the U.S. apple grades. When Combination grades are packed, at least 50 percent of the apples in any lot shall meet the requirements of the higher grade in the combination. (See §51.307.)

COLOR REQUIREMENTS

§ 51.305 Color requirements.

TABLE I—COLOR REQUIREMENTS FOR SPECIFIED U.S. GRADES OF APPLES BY VARIETY

Variety	U.S. extra fancy (percent)	U.S. fancy (percent)	U.S. No. 1 (percent)
Solid Red:			
Black Ben	66	40	25
Gano	66	40	25
Winesap	66	40	25
Other similar varieties[1]	66	40	25
Red Sport varieties[2]	66	40	25
Striped or partially red:			
Jonathan	66	33	25
McIntosh	50	33	25
Cortland	50	33	25
Other similar varieties[3]	50	33	25
Rome Beauty	50	33	15
Stayman	50	33	15
York Imperial	50	33	15
Baldwin	50	25	15
Ben Davis	50	25	15
Delicious	50	25	15
Mammoth Black Twig	50	25	15
Turley	50	25	15
Wagener	50	25	15
Wealthy	50	25	15
Willow Twig	50	25	15
Northern Spy	50	25	15
Other similar varieties[4]	50	25	15
Hubbardston	50	15	10
Stark	50	15	10
Other similar varieties	50	15	10
Red June	50	15	(5)
Red Gravenstein	50	15	(5)
Williams	50	15	(5)
Other similar varieties	50	15	(5)
Gravenstein	25	10	(8)
Duchess	25	10	(5)
Other similar varieties[6]	25	10	(5)
Red cheeked or blushed:			
Maiden Blush	(7)	(5)	(8)
Twenty Ounce	(7)	(5)	(8)
Winter Banana	(7)	(5)	(8)
Other similar varieties	(7)	(5)	(8)
Green varieties	(9)	(9)	(9)
Yellow varieties	(9)	(9)	(9)
Golden Delicious	(10)	(10)	(9)

[1] Arkansas Black, Beacon, Detroit Red, Esopus Spitzenburg, King David, Lowry, Minjon.
[2] When Red Sport varieties are specified as such they shall meet the color requirements specified for Red Sport varieties.
[3] Haralson, Kendall, Macoun, Snow (Fameuse).
[4] Bonum, Early McIntosh, Limbertwig, Milton, Nero, Paragon, Melba.
[5] Tinge of color.
[6] Red Astrachan, Smokehouse, Summer Rambo, Dudley.
[7] Blush Cheek.
[8] None.
[9] Characteristic ground color.
[10] 75 percent or more of the surface of the apple shall show white or light green predominating over the green color.

In addition to the requirement specified for the grades set forth in §§ 51.300 to 51.304 apples of these grades shall have the percentage of color specified for the variety in Table I appearing in this section. For the solid red varieties the percentage stated refers to the area of the surface which must be covered with a good shade of solid red characteristic of the variety: *Provided,* That an apple having color of a lighter shade of solid red or striped red than that considered as a good shade of red characteristic of the variety may be admitted to a grade, provided it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of good red characteristic of the variety required for the grade. For the striped red varieties the percentage stated refers to the area of the surface in which the stripes of a good shade of red characteristic of the variety shall predominate over stripes of lighter red, green, or yellow. However, an apple having color of a lighter shade than that considered as a good shade of red characteristic of the variety may be admitted to a grade, provided it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of stripes of a good red characteristic of the variety required for the grade. Faded brown stripes shall not be considered as color except in the case of the Gray Baldwin variety.

(a) Color standards USDA Visual Aid APL–L–1 (including plates (A), (B), (C), (D), (E), and (F)) consist of a folder containing the color requirements for apples set forth in this section and five plates illustrating minimum good shade of solid red or striped red color, minimum compensating color and a shade not considered color, for Red Delicious, Winesap, Delicious, McIntosh, and Jonathan varieties, and one plate illustrating minimum white or light green color and characteristic color for the Golden Delicious variety. These color standards may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such Service. Duplicates of the color standards may be purchased

from the John Henry Co., Post Office Box 1410, Lansing, MI 48904.

[29 FR 10573, July 30, 1964, as amended at 37 FR 14381, July 20, 1972. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

UNCLASSIFIED

§ 51.306 Unclassified.

''Unclassified'' consists of apples which have not been classified in conformity with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

TOLERANCES

§ 51.307 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades the following tolerances are provided as specified:

(a) *Defects*—(1) *U.S. Extra Fancy, U.S. Fancy, U.S. No. 1, U.S. No. 1 Early and U.S. No. 1 Hail grades.* 10 percent of the apples in any lot may fail to meet the requirements of the grade, but not more than one-half of this amount, or 5 percent, shall be allowed for apples which are seriously damaged, including therein not more than 1 percent for apples affected by decay or internal breakdown.

(2) *U.S. Utility grade.* 10 percent of the apples in any lot may fail to meet the requirements of the grade, but not more than one-half of this amount, or 5 percent, shall be allowed for apples which are seriously damaged by insects, and including in the total tolerance not more than 1 percent for apples affected by decay or internal breakdown.

(b) When applying the foregoing tolerances to Combination grades no part of any tolerance shall be allowed to reduce, for the lot as a whole, the 50 percent of apples of the higher grade required in the combination but individual containers shall have not less than 40 percent of the higher grade.

(c) *Size.* When size is designated by the numerical count for a container, not more than 5 percent of the apples in the lot may vary more than ¼ inch in diameter. When size is designated by minimum or maximum diameter, not more than 5 percent of the apples in any lot may be smaller than the designated minimum and not more than 10 percent may be larger than the designated maximum.

APPLICATION OF TOLERANCES

§ 51.308 Application of tolerances.

The contents of individual packages in the lot, are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(a) Packages which contain more than 10 pounds:

(1) Shall have not more than one and one-half times a specified tolerance of 10 percent or more and not more than double a tolerance of less than 10 percent, except that at least one apple which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package.

(b) Packages which contain 10 pounds or less:

(1) Not over 10 percent of the packages may have more than three times the tolerance specified, except that at least one defective apple may be permitted in any package: *Provided,* That not more than one apple or more than 6 percent (whichever is the larger amount) may be seriously damaged by insects or affected by decay or internal breakdown.

CALCULATION OF PERCENTAGES

§ 51.309 Calculation of percentages.

(a) When the numerical count is marked on the container, percentages shall be calculated on the basis of count.

(b) When the minimum diameter or minimum and maximum diameters are marked on a container or when the apples are jumbled in a container or in bulk, percentages shall be calculated on the basis of weight or an equivalent basis.

[41 FR 11312, Mar. 18, 1976. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

CONDITION AFTER STORAGE OR TRANSIT

§ 51.310 Condition after storage or transit.

(a) Decay, scald or any other deterioration which may have developed on apples after they have been in storage or transit shall be considered as affecting condition and not the grade.

PACKING REQUIREMENTS

§ 51.311 Packing requirements.

(a) Apples tray packed or cell packed in cartons shall be arranged according to approved and recognized methods. Packs shall be at least fairly tight[1] or fairly well filled.[2]

(b) Closed cartons containing apples not tray or cell packed shall be fairly well filled[2] or the pack shall be sufficiently tight to prevent any appreciable movement of the apples.

(c) Packs in wooden boxes or baskets shall be sufficiently tight to prevent any appreciable movement of apples within containers when the packages are closed. Each wrapped apple shall be completely enclosed by its individual wrapper.

(d) Apples on the shown face of any container shall be reasonably representative in size, color and quality of the contents.

(e) *Tolerances.* In order to allow for variations incident to proper packing, not more than 10 percent of the containers in any lot may fail to meet these requirements.

[1] ''Fairly tight'' means that apples are of the proper size for molds or cell compartments in which they are packed, and that molds or cells are filled in such a way that no more than slight movement of apples within molds or cells is possible. The top layer of apples, or any pad or space filler over the top layer of apples shall be not more than ¾ inch below the top edge of the carton.

[2] ''Fairly well filled'' means that the net weight of apples in containers ranging from 2,100 to 2,900 cubic inch capacity is not less than 37 pounds for Cortland, Gravenstein, Jonathan, McIntosh and Golden Delicious varieties and not less than 40 pounds for all other varieties.

MARKING REQUIREMENTS

§ 51.312 Marking requirements.

The numerical count or the minimum diameter of the apples packed in a closed container shall be indicated on the container.

(a) When the numerical count is not shown, the minimum diameter shall be plainly stamped, stenciled or otherwise marked on the container in terms of whole inches, or whole inches and not less than eighth inch fractions thereof.

(b) The word ''minimum'', or its abbreviation, when following a diameter size marking, means that the apples are of the size marked or larger. (See §§ 51.307 and 51.308.)

[31 FR 11171, Aug. 24, 1966. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

DEFINITIONS

§ 51.313 Mature.

Mature means that the apples have reached the stage of development which will insure the proper completion of the ripening process. Before a mature apple becomes overripe it will show varying degrees of firmness, depending upon the stage of the ripening process. The following terms are used for describing different stages of firmness of apples:

(a) *Hard* means apples with a tenacious flesh and starchy flavor.

(b) *Firm* means apples with a tenacious flesh but which are becoming crisp with a slightly starchy flavor, except the Delicious variety.

(c) *Firm ripe* means apples with crisp flesh except that the flesh of the Gano, Ben Davis, and Rome Beauty varieties may be slightly mealy.

(d) *Ripe* means apples with mealy flesh and soon to become soft for the variety.

§ 51.314 Overripe.

Overripe means apples which are dead ripe, with flesh very mealy or soft, and past commercial utility.

§ 51.315 Carefully hand-picked.

Carefully hand-picked means that the apples do not show evidence of rough

handling or of having been on the ground.

§51.316 Clean.

Clean means that the apples are free from excessive dirt, dust, spray residue and other foreign material.

§51.317 Fairly well formed.

Fairly well formed means that the apply may be slightly abnormal in shape but not to an extent which detracts materially from its appearance.

§51.318 Injury.

Injury means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which more than slightly detracts from the appearance, or the edible or shipping quality of the apple. The following specific defects shall be considered as injury:

(a) Russeting in the stem cavity or calyx basin which cannot be seen when the apple is placed stem end or calyx end down on a flat surface shall not be considered in determining whether or not an apple is injured by russeting. Smooth net-like russeting outside of the stem cavity or calyx basin shall be considered as injury when an aggregate area of more than 10 percent of the surface is covered, and the color of the russeting shows no very pronounced contrast with the background color of the apple, or lesser amounts of more conspicuous net-like russeting when the appearance is affected to a greater extent than the above amount permitted.

(b) Sunburn or sprayburn, when the discolored area does not blend into the normal color of the fruit.

(c) Dark brown or black limb rubs which affect a total area of more than one-fourth inch in diameter, except that light brown limb rubs of a russet character shall be considered under the definition of injury by russeting.[3]

(d) Hail marks, drought spots, other similar depressions or scars:

(1) When the skin is broken, whether healed or unhealed;

(2) When there is appreciable discoloration of the surface;

(3) When any surface indentation exceeds one-sixteenth inch in depth;

(4) When any surface indentation exceeds one-eighth inch in diameter; or,

(5) When the aggregate affected area of such spots exceeds one-half inch in diameter.[3]

(e) Disease: (1) Cedar rust infection which affects a total area of more than three-sixteenths inch in diameter.[3]

(2) Sooty blotch or fly speck which is thinly scattered over more than 5 percent of the surface, or dark, heavily concentrated spots which affect an area of more than one-fourth inch in diameter.[3]

(3) Red skin spots which are thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-fourth inch in diameter.[3]

(f) Insects: (1) Any healed sting or healed stings which affect a total area of more than one-eighth inch in diameter including any encircling discolored rings.[3]

(2) Worm holes.

§51.319 Damage.

Damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or shipping quality of the apple. The following specific defects shall be considered as damage:

(a) Russeting in the stem cavity or calyx basin which cannot be seen when the apple is placed stem end or calyx end down on a flat surface shall not be considered in determining whether or not an apple is damaged by russeting, except that excessively rough or bark-like russeting in the stem cavity or calyx basin shall be considered as damage when the appearance of the apple is materially affected. The following types and amounts of russeting outside of the stem cavity or calyx basin shall be considered as damage:

(1) Russeting which is excessively rough on Roxbury Russet and other similar varieties.

[3] The area refers to that of a circle of the specified diameter.

(2) Smooth net-like russeting, when an aggregate area of more than 15 percent of the surface is covered, and the color of the russeting shows no very pronounced contrast with the background color of the apple, or lesser amounts of more conspicuous net-like russeting when the appearance is affected to a greater extent than the above amount permitted.

(3) Smooth solid russeting, when an aggregate area of more than 5 percent of the surface is covered, and the pattern and color of the russeting shows no very pronounced contrast with the background color of the apple, or lesser amounts of more conspicuous solid russeting when the appearance is affected to a greater extent than the above amount permitted.

(4) Slightly rough russeting which covers an aggregate area of more than one-half inch in diameter.[3]

(5) Rough russeting which covers an aggregate area of more than one-fourth inch in diameter.[3]

(b) Sunburn or sprayburn which has caused blistering or cracking of the skin, or when the discolored area does not blend into the normal color of the fruit unless the injury can be classed as russeting.

(c) Limb rubs which affect a total area of more than one-half inch in diameter, except that light brown limb rubs of a russet character shall be considered under the definition of damage by russeting.[3]

(d) Hail marks, drought spots, other similar depressions or scars:

(1) When any unhealed mark is present;

(2) When any surface indentation exceeds one-eighth inch in depth;

(3) When the skin has not been broken and the aggregate affected area exceeds one-half inch in diameter;[3] or,

(4) When the skin has been broken and well healed, and the aggregate affected area exceeds one-fourth inch in diameter.[3]

(e) Stem or calyx cracks which are not well healed, or well healed stem or calyx cracks which exceed an aggregate length of one-fourth inch.

(f) Invisible water core existing around the core and extending to water core in the vascular bundles; or surrounding the vascular bundles when the affected areas surrounding three or more vascular bundles meet or coalesce; or existing in more than slight degree outside the circular area formed by the vascular bundles.

(g) Disease: (1) Scab spots which affect a total area of more than one-fourth inch in diameter.[3]

(2) Cedar rust infection which affects a total area of more than one-fourth inch in diameter.[3]

(3) Sooty blotch or fly speck which is thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter.[3]

(4) Red skin spots which are thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter.[3]

(h) Insects: (1) Any healed sting or healed stings which affect a total area of more than three-sixteenths inch in diameter including any encircling discolored rings.[3]

(2) Worm holes.

§ 51.320 Serious damage.

Serious damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detracts from the appearance, or the edible or shipping quality of the apple. The following specific defects shall be considered as serious damage:

(a) The following types and amounts of russeting shall be considered as serious damage:

(1) Smooth solid russeting, when more than one-half of the surface in the aggregate is covered, including any russeting in the stem cavity or calyx basin, or slightly rough, or excessively rough or bark-like russeting, which detracts from the appearance of the fruit to a greater extent than the amount of smooth solid russeting permitted: *Provided,* That any amount of russeting shall be permitted on Roxbury Russet and other similar varieties.

[3] The area refers to that of a circle of the specified diameter.

(b) Sunburn or sprayburn which seriously detracts from the appearance of the fruit.

(c) Limb rubs which affect more than one-tenth of the surface in the aggregate.

(d) Hail marks, drought spots, or scars, if they materially deform or disfigure the fruit, or if such defects affect more than one-tenth of the surface in the aggregate: *Provided,* That no hail marks which are unhealed shall be permitted and not more than an aggregate area of one-half inch shall be allowed for well healed hail marks where the skin has been broken.[3]

(e) Stem or calyx cracks which are not well healed, or well healed stem or calyx cracks which exceed an aggregate length of one-half inch.

(f) Visible water core which affects an area of more than one-half inch in diameter.[3]

(g) Disease: (1) Scab spots which affect a total area of more than three-fourths inch in diameter.[3]

(2) Cedar rust infection which affects a total area of more than three-fourths inch in diameter.[3]

(3) Sooty blotch or fly speck which affects more than one-third of the surface.

(4) Red skin spots which affect more than one-third of the surface.

(5) Bitter pit or Jonathan spot which is thinly scattered over more than one-tenth of the surface and does not materially deform or disfigure the fruit.

(h) Insects: (1) Healed stings which affect a total area of more than one-fourth inch in diameter including any encircling discolored rings.[3]

(2) Worm holes.

§51.321 Seriously deformed.

Seriously deformed means that the apple is so badly misshapen that its appearance is seriously affected.

§51.322 Diameter.

When measuring for minimum size, *diameter* means the greatest dimension of the apple measured at right angles to a line from stem to blossom end. When measuring for maximum size, ''diameter'' means the smallest dimension of the apple determined by passing the apple through a round opening in any position.

U.S. CONDITION STANDARDS FOR EXPORT

§51.323 U.S. Condition Standards for Export.[4]

(a) Not more than 5 percent of the apples in any lot shall be further advanced in maturity than firm ripe.

(b) Not more than 5 percent of the apples in any lot shall be damaged by storage scab.

(c) Not more than a total of 5 percent of the apples in any lot shall be affected by scald, internal breakdown, freezing injury, or decay; or damaged by water core, bitter pit, Jonathan spot, or other condition factors: *Provided,* That:

(1) Not more than a total of 2 percent shall be allowed for apples affected by decay and soft scald;

(2) Not more than 2 percent shall be allowed for apples affected by internal breakdown; and,

(3) Not more than 2 percent shall be allowed for apples affected by slight scald.

(d) Container packs shall comply with packing requirements specified in §51.311 of the United States Standards for Grades of Apples.

(e) Any lot of apples shall be considered as meeting the U.S. Condition Standards for Export if the entire lot averages within the requirements specified: *Provided,* That no package in any lot shall have more than double the percentages specified, except that for packages which contain 10 pounds or less, individual packages in any lot may have not more than three times the tolerance or one apple (whichever is the greater amount).

NOTE: ''Damage by water core'' means externally invisible water core existing around the core and extending to water core in the vascular bundles; or surrounding the vascular bundles when the affected areas surrounding three or more vascular bundles meet or coalesce; or existing in more than slight degree outside the circular area formed by the vascular bundles; or any externally visible water core.

[4] These standards may be applied to domestic shipments of apples as well as export lots, and may be referred to as ''U.S. Condition Standards''.

Subpart—United States Standards for Grades of Apples for Processing

SOURCE: 26 FR 3604, Apr. 27, 1961, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.340 U.S. No. 1.

''U.S. No. 1'' consists of apples of one variety, unless designated as mixed varieties, which are not overripe, which are free from decay, worm holes, freezing injury and internal breakdown and free from any other defect, or combination of defects, the removal of which in the usual commercial preparation for use will cause a loss of more than 5 percent, by weight, of the apple.

§ 51.341 U.S. No. 2.

''U.S. No. 2'' consists of apples of one variety, unless designated as mixed varieties, which are not overripe, which are free from decay, worm holes, freezing injury and internal breakdown and free from any other defect, or combination of defects, the removal of which in the usual commercial preparation for use will cause a loss of more than 12 percent, by weight, of the apple.

§ 51.342 U.S. Cider.

''U.S. Cider'' consists of apples which are free from decay, worm holes and internal breakdown.

CULLS

§ 51.343 Culls.

''Culls'' consist of apples which fail to meet the requirements of U.S. Cider Grade.

SIZE

§ 51.344 Size.

(a) The minimum and maximum sizes or range of sizes shall be determined as agreed upon by buyer and seller.

(b) Unless otherwise specified, the minimum and maximum sizes or range of sizes shall be determined by the use of an approved sizing chain of the exact dimension specified in the agreement between buyer and seller.

(c) Size is the dimension of the apples determined by the smallest opening through which it will pass.

APPLICATION OF STANDARDS

§ 51.345 Application of standards.

(a) When a lot of apples is required to meet a specific U.S. grade, the tolerances as set forth in § 51.346 shall apply. When packed in closed packages the application of tolerances in § 51.347 shall apply. The application of tolerances shall not apply to apples in open or bulk containers.

(b) In the application of these standards to determine the percentage of the lot which meets the requirements of each of the grades, tolerances shall not apply.

TOLERANCES

§ 51.346 Tolerances.

When a lot of apples is required to meet one of the U.S. grades, the apples shall not be further advanced in maturity than generally firm ripe, and the following tolerances, by weight, shall apply:

(a) *For defects.* 10 percent for apples which fail to meet the requirements of the grade: *Provided*, That included in this amount not more than the following percentages shall be allowed for the defects listed:

(1) 2 percent for apples which are affected by decay;

(2) 2 percent for apples which are affected by internal breakdown; and,

(3) 5 percent for apples which are affected by worm holes.

(b) *For off-size.* 5 percent for apples which are smaller than any specified minimum size, and 10 percent for apples larger than any specified maximum size.

APPLICATION OF TOLERANCES

§ 51.347 Application of tolerances.

Apples in closed packages are subject to the following limitations provided the averages for the entire lot are within the tolerances specified for the grade:

(a) For a tolerance of 10 percent, individual packages shall have not more than one and one-half times the tolerance specified. For a tolerance of less

than 10 percent, individual packages shall have not more than double the tolerances specified.

DEFINITIONS

§51.348 One variety.

One variety within the meaning of these standards shall include all bud sports and strains of the specified variety.

§51.349 Overripe.

Overripe means apples which are dead ripe, and with flesh very mealy or soft.

Subpart—United States Standards for Grades of Cantaloups[1]

SOURCE: 26 FR 2217, Mar. 16, 1961, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§51.475 U.S. Fancy.

''U.S. Fancy'' consists of cantaloups which meet the requirements of U.S. No. 1 grade except that the cantaloups have very good internal quality and have uniform appearance.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling the following tolerances, by count, shall be permitted, except that these tolerances shall not apply to the requirements relating to internal quality and uniformity of appearance:

(1) *At shipping point.*[2] 8 percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for cantaloups which are affected by decay or mold.

(2) *En route or at destination.* 12 percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for cantaloups which fail to meet the requirements of this grade because of permanent defects; or,

(ii) 6 percent for cantaloups which are seriously damaged, including therein not more than 4 percent for cantaloups which are seriously damaged by permanent defects and not more than 2 percent for cantaloups which are affected by decay. (See §51.480.)

§51.476 U.S. No. 1.

''U.S. No. 1'' consists of cantaloups of one type which are mature and have good internal quality but are not overripe or soft or wilted, which are well formed, well netted, and free from decay, wet slip and sunscald, and free from damage caused by liquid in the seed cavity, sunburn, hail, dirt, surface mold or other disease, aphis or other insects, scars, cracks, sunken areas, ground spot, bruises, or mechanical or other means.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling the following tolerances, by count, shall be permitted, except that these tolerances shall not apply to the requirement relating to internal quality.

(1) *At shipping point.*[2] *8* percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for cantaloups which are affected by decay or mold.

(2) *En route or at destination.* 12 percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

[1] Packing in the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

[2] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

[2] See footnote 2 to §51.475.

(i) 8 percent for cantaloups which fail to meet the requirements of this grade because of permanent defects; or,

(ii) 6 percent for cantaloups which are seriously damaged, including therein not more than 4 percent for cantaloups which are seriously damaged by permanent defects and not more than 2 percent for cantaloups which are affected by decay. (See § 51.480.)

§ 51.477 U.S. Commercial.

''U.S. Commercial'' consists of cantaloups of one type which are mature but not overripe or soft or wilted, which are well formed and fairly well netted, and free from decay, wet slip and sunscald, and free from damage caused by liquid in the seed cavity, sunburn, hail, dirt, surface mold or other disease, aphis or other insects, scars, cracks, sunken areas, ground spot, bruises, or mechanical or other means.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling the following tolerances, by count, shall be permitted:

(1) *At shipping point.* 16 percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 12 percent for cantaloups which fail to meet the requirements of this grade because of condition defects;

(ii) 4 percent for cantaloups which are seriously damaged, including therein not more than one-half of 1 percent for cantaloups affected by decay or mold.

(2) *En route or at destination.* 24 percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 16 percent for cantaloups which fail to meet the requirements of this grade because of permanent defects;

(ii) 12 percent for cantaloups which fail to meet the requirements of this grade because of condition defects; or,

(iii) 8 percent for cantaloups which are seriously damaged, including therein not more than 4 percent for cantaloups which are seriously damaged by permanent defects and not more than 2 percent for cantaloups which are affected by decay. (See § 51.480.)

[26 FR 2217, Mar. 16, 1961; 27 FR 2307, Mar. 10, 1962, as amended at 33 FR 7619, May 23, 1968. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.478 U.S. No. 2.

''U.S. No. 2'' consists of cantaloups of one type which are mature but not overripe or soft or wilted, which are fairly well formed and fairly well netted, which are free from decay, wet slip and sunscald, and free from serious damage caused by liquid in the seed cavity, sunburn, hail, dirt, surface mold or other disease, aphis or other insects, scars, cracks, sunken areas, bruises, or mechanical or other means.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling the following tolerances, by count, shall be permitted:

(1) *At shipping point.* 8 percent for cantaloups in any lot which fail to meet the requirements of this grade including therein not more than one-half of 1 percent for cantaloups which are affected by decay or mold.

(2) *En route or at destination.* 12 percent for cantaloups in any lot which fail to meet the requirements of this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for the defects listed:

(i) 8 percent for cantaloups which fail to meet the requirements of this grade because of defects of a permanent nature; or,

(ii) 2 percent for cantaloups which are affected by decay. (See § 51.480.)

UNCLASSIFIED

§ 51.479 Unclassified.

''Unclassified'' consists of cantaloups which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

APPLICATION OF TOLERANCES

§51.480 Application of tolerances.

The contents of individual packages are subject to the following limitation: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(a) A package may contain not more than double any specified tolerance except that at least two defective specimens may be permitted in any package.

DEFINITIONS

§51.481 Very good internal quality.

Very good internal quality means that the combined juice from the edible portion of a sample of cantaloups selected at random contains not less than 11 percent soluble solids as determined by an approved hand refractometer.

§51.482 Uniform in appearance.

Uniform in appearance means that not more than one-tenth of the packages in any lot contain cantaloups which show sufficient variation in shape, size, ground color or netting to materially detract from the appearance of the contents of the individual packages, or which are not packed according to the approved and recognized methods for the package.

§51.483 One type.

One type means that the cantaloups in any container are similar in color of flesh and are not decidely different in shape, character of netting and prominence of ribbing.

§51.484 Mature.

Mature means that the cantaloup has reached the stage of maturity which will insure the proper completion of the normal ripening process.

§51.485 Good internal quality.

Good internal quality means that the combined juice from the edible portion of a sample of cantaloups selected at random contains not less than 9 percent soluble solids as determined by an approved hand refractometer.

§51.486 Soft.

Soft means that the cantaloup yields readily to slight pressure.

§51.487 Wilted.

Wilted means that the cantaloup lacks turgidity and is somewhat flabby, spongy and pliable under moderate pressure.

§51.488 Well formed.

Well formed means that the cantaloup has the normal shape characteristic of the variety.

§51.489 Well netted.

Well netted means that to an extent characteristic of the variety the cantaloup is well covered with fully developed, well raised netting, some portion of which is well rounded with practically no crease.

§51.490 Decay.

Decay means breakdown, disintegration or fermentation of the flesh or rind of the cantaloup caused by bacteria or fungi.

§51.491 Wet slip.

Wet slip means a condition present at time of packing in which the stem scar is abnormally large, excessively wet and slippery, yields to slight pressure, and is frequently accompanied by fresh radial growth cracks at the edge of the stem scar.

§51.492 Sunscald.

Sunscald means discolored or bleached, sunken areas of the surface having tough epidermis with underlying flesh leathery and usually off-color.

§51.493 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or shipping quality of the cantaloup. The following specific defects shall be considered as damage:

(a) Liquid in the seed cavity under the following circumstances:

(1) At shipping point when more than a slight amount of liquid is present in the seed cavity; or,

(2) En route or at destination when an objectionably large amount of liquid is present in the seed cavity, or when the flesh of the cavity wall is mushy or noticeably discolored;

(b) Sunburn when the color of the flesh is materially changed; when the rind is hard, tough, thin, or definitely flattened; when distinct flattening of the netting or dark yellow surface discoloration affects an aggregate area exceeding 20 percent of the surface of the cantaloup; or when brown, gray, purple or dark green surface discoloration detracts from the appearance of the cantaloup to a greater extent than the area of dark yellow discoloration permitted;

(c) Hail when the injury is unhealed or deep;

(d) Surface mold under the following circumstances:

(1) At shipping point when any surface mold is visible; or,

(2) En route or at destination when the color, character, or location of the mold materially detracts from the appearance or marketing quality of the cantaloup;

(e) Aphis when aphis honeydew is more than slightly sticky, or when resulting discoloration more than slightly detracts from the appearance of the cantaloup;

(f) Scars when healed, shallow, smooth and light colored and the aggregate area affected exceeds 5 percent of the surface of the cantaloup; or when deep, rough or dark colored and detracting from the appearance to a greater extent than the area of healed, shallow, smooth and light colored scars permitted. Smooth scarring at the blossom end and coalesced netting should not be considered in determining damage caused by scarring unless materially detracting from the appearance of the cantaloup;

(g) Cracks when deep or not dry. Slight, dry cracks at the ends or in the sutures of the cantaloup shall not be considered damage;

(h) Ground spot when the rind of the affected area is thin or weak, or when the size or color of the affected area or the character of netting on the area in relation to the remainder of the surface of the cantaloup materially detracts from the appearance of the cantaloup;

(i) Bruises when the surface of the cantaloup is definitely flattened or indented, or when the underlying flesh is noticeably discolored; and,

(j) Mechanical means when cuts or gouges are deep or when any skin break is unhealed.

§ 51.494 Serious damage.

Serious damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the cantaloup. The following specific defects shall be considered as serious damage:

(a) Liquid in the seed cavity under the following circumstances:

(1) At shipping point when a large amount of liquid is present in the seed cavity or the flesh of the cavity wall is noticeably soft or discolored or when any fermentation is present; or,

(2) En route or at destination when there is any fermentation of the liquid in the seed cavity, or when the flesh of the cavity wall shows fermentation or is badly discolored;

(b) Sunburn when the flesh is seriously discolored, when causing cracking of the rind, or when causing flattening of the rind which seriously detracts from the appearance of the cantaloup;

(c) Hail when the injury is unhealed;

(d) Surface mold under the following circumstances:

(1) At shipping point when any surface mold is visible; or,

(2) En route or at destination when the color, character, or location of the mold seriously detracts from the appearance or marketing quality of the cantaloup;

(e) Cracks when fresh and deep;

(f) Bruises when the surface of the cantaloup is seriously flattened or indented or when a material portion of the underlying flesh is broken down; and,

(g) Mechanical means when fresh cuts or gouges extend into the edible portion of the cantaloup.

§51.494a Permanent defects.

Permanent defects means defects which are not subject to change during shipping or storage; including, but not limited to factors of shape, netting, scarring, sunscald, sunburn and injury caused by hail or insects, and mechanical injury which is so located as to indicate that it occurred prior to shipment.

[26 FR 2217, Mar. 16, 1961. Redesignated at 27 FR 2307, Mar. 10, 1962, 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§51.494b Fairly well netted.

Fairly well netted means that to an extent characteristic of the variety the cantaloup is fairly well covered with fairly good netting.

[26 FR 2217, Mar. 16, 1961. Redesignated at 27 FR 2307, Mar. 10, 1962, 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§51.494c Condition defects.

Condition defects means defects which may develop or change during shipment or storage; including, but not limited to decayed or soft cantaloups and such factors as liquid in the seed cavity, surface mold, sunken areas, fresh cracks, and bruising which is so located as to indicate that it occurred after packing.

[26 FR 2217, Mar. 16, 1961. Redesignated at 27 FR 2307, Mar. 10, 1962, 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

Subpart—United States Standards for Celery

SOURCE: 24 FR 2640, Apr. 7, 1959, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§51.560 U.S. Extra No. 1.

''U.S. Extra No. 1'' consists of stalks of celery of similar varietal characteristics which are well developed, well formed, clean, well trimmed, compact, and which are free from blackheart, brown stem, soft rot, doubles and free from damage caused by freezing, growth cracks, horizontal cracks, pithy branches, seedstems, suckers, wilting, blight, other disease, insects or mechanical or other means. Stalks shall be green unless specified as fairly well blanched, or mixed blanch.

(a) The average midrib length of the outer whorl of branches shall be not less than 7 inches.

(b) Unless otherwise specified in connection with the grade, stalks shall be of such length as to extend from one side, end or bottom of the container to within 1½ inches of the corresponding opposite side, end or top of the container. Such measurement shall not include the bulge. In any container when stalk length is specified, it shall be the minimum length in terms of whole inches of even number, as 12 inches, 14 inches, etc., in accordance with the facts.

(c) In order to allow for variations incident to proper grading and handling, the following tolerances shall be permitted:

(1) *For defects.* 10 percent, by count, in any lot for stalks which fail to meet the requirements of the grade, including therein not more than 2 percent for soft rot;

(2) *For off-length stalks.* 5 percent, by count, in any lot for stalks which fail to meet the minimum length required or specified; and,

(3) *For off-length midribs.* 5 percent, by count, in any lot for stalks which fail to meet the requirements as to average midrib length.

§51.561 U.S. No. 1.

''U.S. No. 1'' consists of stalks of celery of similar varietal characteristics which are fairly well developed, fairly well formed, well trimmed, fairly compact, and which are free from blackheart and soft rot and free from damage caused by freezing, growth cracks, horizontal cracks, pithy branches, seedstems, suckers, dirt, doubles, wilting, blight, other disease, insects or mechanical or other means. Stalks shall be green unless specified as fairly well blanched, or mixed blanch.

(a) Unless otherwise specified, the average midrib length of the outer whorl

of branches shall be not less than 6 inches.

(b) Unless otherwise specified in connection with the grade, stalks shall be of such length as to extend from one side, end or bottom of the container to within 1½ inches of the corresponding opposite side, end or top of the container. Such measurement shall not include the bulge. In any container when stalk length is specified, it shall be the minimum length in terms of whole inches of even number, as 12 inches, 14 inches, etc., in accordance with the facts.

(c) In order to allow for variations incident to proper grading and handling, the following tolerances shall be permitted:

(1) *For defects.* 10 percent, by count, in any lot for stalks which fail to meet the requirements of the grade, including therein not more than 2 percent for soft rot;

(2) *For off-length stalks.* 5 percent, by count, in any lot for stalks which fail to meet the minimum length required or specified; and,

(3) *For off-length midribs.* 5 percent, by count, in any lot for stalks which fail to meet the requirements as to average midrib length.

§ 51.562 U.S. No. 2.

''U.S. No. 2'' consists of stalks of celery of similar varietal characteristics which are reasonably well developed, reasonably well formed, fairly well trimmed and are free from blackheart and soft rot and free from serious damage caused by freezing, growth cracks, horizontal cracks, pithy branches, seedstems, dirt, doubles, wilting, blight, other disease, insects or mechanical or other means. Stalks shall be green unless specified as fairly well blanched, or mixed blanch.

(a) Unless otherwise specified, the average midrib length of the outer whorl of branches shall be not less than 4 inches.

(b) Unless otherwise specified in connection with the grade, stalks shall be of such length as to extend from one side, end or bottom of the container to within 1½ inches of the corresponding opposite side, end or top of the container. Such measurement shall not include the bulge. In any container when stalk length is specified, it shall be the minimum length in terms of whole inches of even number, as 12 inches, 14 inches, etc., in accordance with the facts.

(c) In order to allow for variations incident to proper grading and handling, the following tolerances shall be permitted:

(1) *For defects.* 10 percent, by count, in any lot for stalks which fail to meet the requirements of the grade, including therein not more than 2 percent for soft rot;

(2) *For off-length stalks.* 5 percent, by count, in any lot for stalks which fail to meet the minimum length required or specified; and,

(3) *For off-length midribs.* 5 percent, by count, in any lot for stalks which fail to meet the requirements as to average midrib length.

UNCLASSIFIED

§ 51.563 Unclassified.

''Unclassified'' consists of stalks of celery which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

COUNT

§ 51.564 Requirements as to count.

(a) The number of stalks of celery in the container may be specified by numerical count or in terms of dozens or half-dozens. Variations from the number specified shall be permitted as follows: *Provided*, That the average for the lot is not less than the number specified:

Specified number per package	*Variations permitted in individual packages*
24 stalks or less	1 stalk variation.
25 to 50 stalks, inclusive	3 stalk variation.
51 to 70 stalks, inclusive	4 stalk variation.
More than 70 stalks	5 stalk variation.

APPLICATION OF TOLERANCES

§51.565 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified:

(1) For packages which contain 20 specimens or more and a tolerance of 10 percent or more is provided, individual packages in any lot may contain not more than one and one-half times the tolerance specified. For packages which contain 20 specimens or more and a tolerance of less than 10 percent is provided, individual packages may contain not more than double the tolerance specified except that at least one defective and one off-size specimen may be permitted in any package; and,

(2) For packages which contain less than 20 specimens, individual packages in any lot may contain not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package: *Provided,* That for packages which contain 6 specimens or less, individual packages in any lot are not restricted as to the percentage of defects: *And provided further,* That not more than one specimen which is affected by decay or otherwise seriously damaged and one off-size specimen may be permitted in any package.

DEFINITIONS

§51.566 Stalk.

Stalk means an individual plant.

§51.567 Similar varietal characteristics.

Similar varietal characteristics means that the stalks in any package have the same general appearance and character of growth.

§51.568 Well developed.

Well developed means that the branches are of good width and thickness in relation to the length of midribs and type of celery and that the heart branches are of reasonable number, length and stockiness.

§51.569 Well formed.

Well formed means that the branches are fairly straight and not more than slightly curved or twisted.

§51.570 Clean.

Clean means that the stalk is practically free from dirt or other foreign material. Stalks shall be permitted to have a small amount of dirt on the inside of the branches or in the heart branches which cannot be removed by good commercial methods of washing.

§51.571 Well trimmed.

Well trimmed means that not more than 2 relatively thin, short or spindly, or coarse and fibrous outer branches remain; that the main root has been cut off so as not to extend more than 1½ inches below the point of attachment of the lowest outer branch; that secondary rootlets are not of such number or length as to materially affect the appearance of the stalk; and, that the appearance is not materially affected by the presence of discolored leaves or by excessive removal of leaves or portions of leaves.

§51.572 Compact.

Compact means that the branches on the stalk are fairly close together throughout most of their length.

§51.573 Damage.

Damage, unless otherwise specifically defined in this section, means any defect which materially affects the appearance, or the edible or shipping quality of the celery stalk or the general appearance of the stalks in the container. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Growth cracks when more than 2 branches are affected by growth cracks which are over one-half inch in length, or when more than 6 branches have growth cracks;

(b) Horizontal cracks when more than 3 branches have horizontal cracks which are over one-half inch in length, or when more than 6 branches have horizontal cracks;

(c) Pithy branches when more than 2 are pithy in that portion of the midrib between a point 1½ inches above the point of attachment to the base and the first node, or between a point 1½ inches below the first node and the point of attachment to the base, or when pith occurs at both ends of the midrib and more than a total of 1½ inches is affected: *Provided*, That stalks having 6 outer branches or less shall have not more than one-third of the outer branches affected by pith as described above;

(d) Seedstems when the length of seedstem exceeds twice the diameter of the stalk or 8 inches in length (see §§ 51.587 and 51.588);

(e) Dirt when there is caked dirt on the stalk, or when dirt is present between the branches to the extent that the appearance is materially affected;

(f) Doubles when not separated and the appearance is materially affected, or when separated and either of the stalks is badly curved;

(g) Disease: (1) Brown stem, cracked stem and crater blotch when materially affecting more than 2 branches, or when the aggregate area exceeds two-thirds of a square inch on the branches; and,

(2) Discoloration when each of more than 2 branches or ¼ of the branches of the stalk, whichever is less, has more than 3 distinct hair-like lines more than 3 inches long occurring on the outer side of the branch or an aggregate area of more than ¼ by 1 inch of blotch or solid type discoloration occurring on the inner side;

(h) Insects when worms are present, or when insect injury occurs on heart branches, or when insect injury affects the midrib portion of more than 2 branches, or when injury or other portions materially affects the appearance of the stalk; and,

(i) Mechanical injury when the root has been cut off too closely leaving the branches without support; when more than 2 branches are materially scuffed or bruised; when the branches have been broken above the first node to an extent which materially affects the appearance; or when more than 2 branches are broken below the first node except that all branches may be cut below the first node provided the stalk is of the length specified.

§ 51.574 Green.

Green means that the middle portions of the outer branches on the stalk are generally green to light green color.

§ 51.575 Fairly well blanched.

Fairly well blanched means that the midrib portions of the outer branches on the stalk are generally of a creamy white to pale green color.

§ 51.576 Mixed blanch.

Mixed blanch consists of green and fairly well blanched stalks of celery in the same container.

§ 51.577 Average midrib length.

Average midrib length means the average length of all the branches in the outer whorl measured from the point of attachment at the base to the first node.

§ 51.578 Branch.

Branch means the leaf of a stalk and consists of the edible stem-like portion and the tops or leaf blades.

§ 51.579 Length of stalk.

Length of stalk means the distance from where the root is cut off to a point which represents the average length of the longest branches.

§ 51.580 Fairly well developed.

Fairly well developed means that the branches are of fairly good width and thickness in relation to the length of midribs and type of celery and that there is not excessive open space in the center of the stalk.

§ 51.581 Fairly well formed.

Fairly well formed means that the branches are reasonably straight and not more than moderately curved or twisted.

§ 51.582 Fairly compact.

Fairly compact means that the branches on the stalk are reasonably close together throughout most of their length.

§51.583 Reasonably well developed.

Reasonably well developed means that the branches are of reasonable width and thickness in relation to the length of midribs and type of celery.

§51.584 Reasonably well formed.

Reasonably well formed means that the branches are not crooked, curved or twisted to the extent that the appearance of the stalk is seriously affected.

§51.585 Fairly well trimmed.

Fairly well trimmed means that the main root has been cut off so that it does not extend more than 3 inches below the point of attachment of the lowest outer branch, and that secondary rootlets are not of such number or length as to seriously affect the appearance of the stalk.

§51.586 Serious damage.

Serious damage, unless otherwise specifically defined in this section, means any defect which seriously affects the appearance, or the edible or shipping quality of the celery stalk or the general appearance of the stalks in the container. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(a) Growth cracks when more than 4 branches are affected by growth cracks which are over one-half inch in length, or when more than 8 branches have growth cracks;

(b) Horizontal cracks when more than 5 branches have horizontal cracks which are over one-half inch in length, or when more than 8 branches have horizontal cracks;

(c) Pithy branches when more than 4 are pithy in that portion of the midrib between a point 1½ inches above the point of attachment to the base and the first node, or between a point 1½ inches below the first node and the point of attachment to the base, or when pith occurs at both ends of the midrib and more than a total of 1½ inches is affected: *Provided,* That stalks having 6 outer branches or less shall have not more than one-half of the outer branches affected by pith as described above;

(d) Seedstems when the length of seedstem exceeds 3 times the diameter of the stalk (see §§51.587 and 51.588);

(e) Dirt when dirt is badly caked on the stalk;

(f) Doubles when the inner branches are not fairly well protected;

(g) Disease: (1) Brown stem, cracked stem and crater blotch when seriously affecting more than 4 branches, or when the aggregate area exceeds 1 square inch on the branches; and,

(2) Discoloration when each of more than 5 branches or ½ of the branches of the stalk, whichever is less, has more than 3 distinct hair-like lines more than 3 inches long occurring on the outer side of the branch or an aggregate area of more than ¼ by 1 inch of blotch or solid type discoloration occurring on the inner side;

(h) Insects when worms are present, or when insect injury affects the midrib portion of more than 4 branches, or when injury on other portions seriously affects the appearance of the stalk; and,

(i) Mechanical injury when the root has been cut off too closely leaving the branches without support; when more than 4 branches are materially scuffed or bruised; when the branches have been broken above the first node to an extent which seriously affects the appearance; or when more than 4 branches are broken below the first node except all branches may be cut below the first node provided the stalk is of the length specified.

§51.587 Diameter.

Diameter means the greatest dimension of the stalk measured at a point 2 inches above the point of attachment of the lowest outer branch to the base.

§51.588 Length of seedstem.

Length of seedstem means the distance from the base of the outer branches of the stalk to the top of the actual seedstem, exclusive of any leaves or leafstems attached to the top of the seedstem.

Subpart—United States Consumer Standards for Celery Stalks

SOURCE: 18 FR 7089, Nov. 11, 1953, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.595 General.

These standards do not apply to celery hearts.

GRADES

§ 51.596 U.S. Grade AA.

U.S. Grade AA shall consist of stalks of celery of similar varietal characteristics, which are well developed, and have good heart formation; which are clean, well trimmed, fairly compact, and are free from blackheart, brown stem, decay (except dry type crater rot), doubles, and from damage caused by crater rot, wilting, cutworms, freezing, suckers, growth cracks, hollow crown, pithy branches, seedstems, rust, cracked stem, other diseases, insects or mechanical or other means.

(a) The average midrib length of the outer whorl of branches on stalks in this grade shall be not less than 7 inches. (See §§ 51.599 and 51.600.)

(b) Incident to proper grading and handling other than for average midrib length of branches not more than 5 percent, by count, of the stalks in any lot may fail to meet the requirements of the grade including not more than 1 percent for stalks affected by moist type decay. In addition, not more than 3 percent, by count, of the stalks in any lot may fail to meet the requirements as to average midrib length of the stalks.

§ 51.597 U.S. Grade A.

U.S. Grade A shall consist of stalks of celery of similar varietal characteristics which are fairly well developed and have fairly good heart formation; which are clean, well trimmed, and not badly spread, and which are free from blackheart, decay (except dry type crater rot), doubles, and from damage caused by crater rot, brown stem, wilting, cutworms, freezing, suckers, growth cracks, hollow crown, pithy branches, seedstems, rust, cracked stem, other diseases, insects, or mechanical or other means.

(a) The average midrib length of the outer whorl of branches on stalks in this grade shall be not less than 5 inches. (See §§ 51.599 and 51.600.)

(b) Incident to proper grading and handling other than for average midrib length of branches, not more than 5 percent, by count, of the stalks in any lot may fail to meet the requirements of the grade including not more than 1 percent for stalks affected by moist type decay. In addition, not more than 3 percent, by count, of the stalks in any lot may fail to meet the requirements as to average midrib length of the stalks.

§ 51.598 U.S. Grade B.

U.S. Grade B shall consist of stalks of celery of similar varietal characteristics which are fairly well developed, which are clean, well trimmed and free from blackheart, decay (except dry type crater rot), doubles, and from serious damage caused by crater rot, brown stem, wilting, cutworms, freezing, suckers, growth cracks, hollow crown, pithy branches, seedstems, rust, cracked stem, other diseases, insects, or mechanical or other means.

(a) The average midrib length of the outer whorl of branches on stalks in this grade shall be not less than 4 inches. (See §§ 51.599 and 51.600.)

(b) Incident to proper grading and handling other than for average midrib length of branches, not more than 5 percent, by count, of the stalks in any lot may fail to meet the requirements of this grade including not more than 1 percent for stalks affected by moist type decay. In addition not more than 3 percent, by count, of the stalks in any lot may fail to meet the requirements as to average midrib length of the stalks.

BLANCHING; LENGTH OF STALKS

§ 51.599 Blanching.

There are no requirements in the grades as to blanching. However, celery stalks may be classed as ''green'' when they have a medium to dark green appearance, fairly ''well blanched'' when the midrib portions of the branches on the stalks are generally of a light

greenish to creamy white color, or ''well blanched'' when the midrib portions of the branches on the stalks are generally of a creamy white color. Not more than 5 percent of the stalks in any lot may fail to meet the requirements of any of the above classes.

§51.600 Length of stalks.

There are no requirements in the grades as to stalk length. However, when the stalk length is specified it shall be determined by measuring the distance from where the main root is cut off, to a point which represents the average length of the longest branches and leaves expressed in terms of the nearest whole inch. Incident to proper sizing, not more than 5 percent, by count, of the stalks in any lot may fail to meet any specified stalk length.

OFF-GRADE

§51.601 Off-Grade celery.

Celery stalks which fail to meet the requirements of any of the foregoing grades shall be Off-Grade celery stalks.

DEFINITIONS

§51.602 Stalk.

Stalk means an individual plant.

§51.603 Similar varietal characteristics.

Similar varietal characteristics means that the stalks in any container have the same character of growth. For example, celery of Giant Pascal and Golden Self Blanching types must not be mixed.

§51.604 Well developed.

Well developed means that the outer branches are of good width in relation to the length of midribs and type of celery.

§51.605 Good heart formation.

Good heart formation means that the stalk has a reasonable number of stocky inner heart branches for its size.

§51.606 Clean.

Clean means that the stalk is practically free from dirt or other foreign materials. Stalks shall be permitted to have a small amount of dirt on the inside of the branches or in the heart branches which cannot be removed by good commercial methods of washing.

§51.607 Well trimmed.

Well trimmed means that the outside coarse and damaged branches have been removed and that the root or roots have been neatly trimmed to a reasonable length for the size of the stalk.

§51.608 Fairly compact.

Fairly compact means that the branches are fairly close together on the stalk.

§51.609 Damage.

Damage means any injury or defect which materially affects the appearance, or edible or shipping quality. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect shall be considered as damage:

(a) Crater rot, when moist, or when occurring on more than 2 branches, or when aggregating more than two-thirds of a square inch on the branch or branches.

(b) Cutworms, when the worms are present, or when worm injury occurs on the heart branches, or when occurring on the midrib portion of more than two branches, or when aggregating more than one-half of a square inch on the midrib portion of the branch or branches.

(c) Growth cracks, when the stalk has more than one branch affected by growth cracks any of which are more than one-half inch long.

(d) Pithy branches, when the midribs of more than one branch are pithy. Pithy branches means those which have a distinctly open texture with air spaces in the central portion.

(e) Seedstems, when the stalk has a seedstem the length of which is more than one and one-half times the greatest diameter of the stalk. The greatest diameter of the stalk shall be measured at a point two inches above the point of attachment of the outer branches to the root. The length of the seedstem shall be measured from the point of attachment of the outer

branches at the base of the seedstem to the top of the actual seedstem, exclusive of any leaves or leaf stems attached to the top of the seedstem.

(f) Rust, when there are more than five hair-like lines of any length on one or more heart branches, or when there is more than one square inch in the aggregate on branches other than heart branches.

(g) Cracked stem, when there is more than one-half of a square inch in the aggregate on any or all branches.

§ 51.610 Midrib length.

Midrib length of a branch means the distance between the point of attachment to the root and the first node.

§ 51.611 Fairly well developed.

Fairly well developed means that the outer branches are not spindly or abnormally short and thin.

§ 51.612 Fairly good heart formation.

Fairly good heart formation means that the stalk has a moderate number of fairly stocky inner heart branches for its size.

§ 51.613 Serious damage.

Serious damage means any injury or defect which seriously affects the appearance, or edible or shipping quality. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(a) Crater rot, when moist, or when occurring on more than three branches, or when aggregating more than one square inch on the branch or branches.

(b) Cutworms, when the worms are present, or when worm injury occurs on the heart branches, or when occurring on the midrib portion of more than three branches, or when aggregating more than one square inch on the midrib portion of the branch or branches.

(c) Growth cracks, when the stalk has more than two branches affected by growth cracks any of which are more than one-half inch long.

(d) Pithy branches, when the midribs of more than two branches are pithy. Pithy branches means those which have a distinctly open texture with air spaces in the central portion.

(e) Seedstems, when the stalk has a seedstem the length of which is more than three times the greatest diameter of the stalk. The greatest diameter of the stalk shall be measured at a point two inches above the point of attachment of the outer branches to the root. The length of the seedstem shall be measured from the point of attachment of the outer branches at the base of the seedstem to the top of the actual seedstem, exclusive of any leaves or leafstems attached to the top of the seedstem.

(f) Rust, when there are more than fifteen hair-like lines of any length on one or more heart branches, or when there are more than one and one-half square inches in the aggregate on branches other than heart branches.

(g) Cracked stem, when there is more than one square inch in the aggregate on any or all branches.

Subpart—United States Standards for Grades of Grapefruit (Texas and States Other Than Florida, California, and Arizona)

SOURCE: 34 FR 13905, Aug. 30, 1969, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.620 U.S. Fancy.

''U.S. Fancy'' consists of grapefruit which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(i) Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.638.)

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Smooth texture;

(6) Well formed; and,

(7) Well colored.

(b) Free from:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Cuts not healed;

(5) Skin breakdown;
(6) Decay;
(7) Growth cracks;
(8) Scab;
(9) Sprayburn; and,
(10) Wormy fruit.
(c) Not injured by:
(1) Green spots;
(2) Oil spots;
(3) Scale;
(4) Scars; and,
(5) Thorn scratches.
(d) Not damaged by any other cause.
(e) For tolerances see §51.628.

§51.621 U.S. No. 1.

''U.S. No. 1'' consists of grapefruit which meet the following requirements:
(a) Basic requirement:
(1) Discoloration:
(i) Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See §51.638.)
(2) Firm;
(3) Mature;
(4) Similar varietal characteristics;
(5) Fairly well colored;
(6) Fairly smooth texture; and,
(7) Fairly well formed.
(b) Free from:
(1) Bruises;
(2) Cuts not healed;
(3) Caked melanose;
(4) Growth cracks;
(5) Sprayburn;
(6) Decay; and,
(7) Wormy fruit.
(c) Not damaged by any other cause.
(d) For tolerances see §51.628.

§51.622 U.S. No. 1 Bright.

The requirements for this grade are the same as for U.S. No. 1 except that no fruit may have more than one-tenth of its surface, in the aggregate, affected by discoloration.
(a) For tolerances see §51.628.

§51.623 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except that all fruit must show some discoloration. Not less than the number of fruits required in §51.628, Tables I and II, shall have more than one-half of their surface, in the aggregate, affected by discoloration. The predominating discoloration on these fruits shall be of rust mite type.
(a) For tolerances see §51.628.

§51.624 U.S. Combination.

''U.S. Combination'' consists of a combination of U.S. No. 1 and U.S. No. 2 grapefruit: *Provided*, That the number of U.S. No. 2 fruits specified in §51.628, Tables I and II, are not exceeded.

§51.625 U.S. No. 2.

''U.S. No. 2'' consists of grapefruit which meet the following requirements:
(a) Basic requirements:
(1) Discoloration:
(i) Not more than two-thirds of the surface, in the aggregate, may be affected by discoloration. (See §51.638.)
(2) Fairly firm;
(3) Mature;
(4) Similar varietal characteristics;
(5) May be slightly colored;
(6) Not more than slightly misshapen; and,
(7) Not more than slightly rough texture.
(b) Free from:
(1) Bruises;
(2) Cuts not healed;
(3) Growth cracks;
(4) Decay; and,
(5) Wormy fruit.
(c) Not seriously damaged by any other cause.
(d) For tolerances see §51.628.

§51.626 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that not less than the number of fruits required in §51.628, Tables I and II, shall have more than two-thirds of their surface, in the aggregate, affected by discoloration.
(a) For tolerances see §51.628.

§51.627 U.S. No. 3.

''U.S. No. 3'' consists of grapefruit which meet the following requirements:
(a) Basic requirements:
(1) Mature;
(2) Similar varietal characteristics;
(3) May be misshapen;
(4) May be slightly spongy;
(5) May have rough texture;

(6) Not seriously lumpy or cracked; and,

(7) May be poorly colored.

(i) Not more than 25 percent of the surface may be of a solid dark green color.

(b) Free from:

(1) Cuts not healed;

(2) Decay; and,

(3) Wormy fruit.

(c) Not very seriously damaged by any other cause.

(d) For tolerances see § 51.628.

TOLERANCES

§ 51.628 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, based on sample inspection, the number of defective or off-size specimens in the individual sample, and the number of defective or off-size specimens in the lot, shall be within the limitations specified in Tables I and II. No tolerance shall apply to wormy fruit.

TABLE I—SHIPPING POINT[1]

(A) FOR 1 THROUGH 20 SAMPLES

Factor	Grades	AL[2]	Number of 33-count samples[3]																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Acceptance numbers (maximum permitted)[4]																					
Decay	U.S. Fancy. U.S. No. 1. U.S. Combination. U.S. No. 2.	1	0	0	0	1	[5]1	2	2	2	2	[5]2	2	2	3	3	3	[5]3	3	4	4	4
	U.S. No. 3.	1	0	1	[5]1	1	2	[2]2	2	3	3	[3]3	3	4	4	4	[5]4	5	5	5	[5]5	5
Very serious damage including decay.	U.S. Fancy. U.S. No. 1. U.S. Combination. U.S. No. 2.	4	3	5	7	8	10	11	13	14	16	17	18	20	21	23	24	25	27	28	30	32
Total defects including decay and very serious damage.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. No. 3.	5	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
	U.S. Combination (U.S. No. 2's permitted).	21	18	33	47	62	76	90	104	119	133	147	161	174	188	202	216	230	244	257	271	285
Off-size		7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
Discoloration.	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. Combination.	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
	Acceptance numbers (minimum required)[4]																					
	U.S. No. 1 Bronze. U.S. No. 2 Russet.	0	2	4	8	11	14	18	21	25	28	32	36	39	43	47	50	53	57	61	64	68

TABLE I—SHIPPING POINT[1]—Continued

(B) FOR 21 THROUGH 40 SAMPLES

Factor	Grades	AL[2]	Number of 33-count samples[3]																			
			21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Acceptance numbers (maximum permitted)[4]																					
Decay	U.S. Fancy. U.S. No. 1. U.S. Combination. U.S. No. 2.	1	4	4	[5]4	4	4	5	5	5	5	5	[3]5	5	5	6	6	6	6	6	[3]6	6
	U.S. No. 3.	1	5	6	6	6	[5]6	6	7	7	7	[5]7	7	8	8	8	8	[5]8	9	9	9	9
Very serious damage including decay.	U.S. Fancy. U.S. No. 1. U.S. Combination. U.S. No. 2.	4	32	34	35	36	38	39	40	42	43	44	45	47	48	49	51	52	53	54	56	57
Total defects including decay and very serious damage.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. No. 3.	5	67	70	73	76	79	82	84	87	90	93	96	99	102	105	107	110	113	116	119	122
	U.S. Combination (U.S. No. 2's permitted).	21	298	312	326	339	353	367	380	394	408	421	435	449	462	476	489	503	517	530	544	557
Off-size		7	67	70	73	76	79	82	84	87	90	93	96	99	102	105	107	110	113	116	119	122
Discoloration	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. Combination.	7	67	70	73	76	79	82	84	87	90	93	96	99	102	105	107	110	113	116	119	122
	Acceptance numbers (minimum required)[4]																					
	U.S. No. 1 Bronze. U.S. No. 2 Russet.	0	72	76	80	84	88	92	96	99	103	107	110	114	118	122	126	130	134	137	141	145

[1] Shipping point, as used in these standards, means the point of origin of the shipment in the production area or at port of loading for ship stores or overseas shipments, or in the case of shipments from outside the continental United States, the port of entry into the United States.
[2] AL—Absolute limit permitted in individual 33-count sample.
[3] Same size 33-count.

[4] Acceptance number—maximum or minimum number of defective or off-size fruit permitted.
[5] Preferred number of samples for this acceptance number.

TABLE II—EN ROUTE OR AT DESTINATION

Factor	Grades	AL [1]	Number of 33-count samples [2]																				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Acceptance numbers (maximum permitted) [3]																						
Decay	All.	3	2	3	4	5	6	7	8	9	10	11	12	13	[4]13	14	15	16	17	18	[4]18	19
Very Serious damage other than decay.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. Combination.	4	3	5	7	8	10	11	13	14	16	17	18	20	21	23	24	25	27	28	30	31
Total defects including very serious damage. other than decay.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. No. 3.	5	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
	U.S. Combination (U.S. No. 2's permitted).	21	18	33	47	62	76	90	104	119	133	147	161	174	188	202	216	230	244	257	271	28
Off-size		7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
Discoloration	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. Combination.	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
	Acceptance numbers (minimum required) [3]																						
	U.S. No. 1 Bronze. U.S. No. 2 Russet.	0	2	4	8	11	14	18	21	25	28	32	36	39	43	47	50	53	57	61	64	68

[1] Absolute limit permitted in individual 33-count sample
[2] Sample size—33-count
[3] Acceptance number—maximum or minimum number of defective or off-size fruit permitted
[4] Preferred number of samples for this acceptance number

SAMPLE FOR GRADE OR SIZE DETERMINATION

§ 51.629 Sample for grade or size determination.

Each sample shall consist of 33 grapefruit. When individual packages contain at least 33 grapefruit, the sample is drawn from one package; when individual packages contain less than 33 grapefruit, a sufficient number of adjoining packages are opened to form a 33-count sample. When practicable, at point of packaging, the sample may be obtained from the grading belt or bins after sorting has been completed.

STANDARD PACK

§ 51.630 Standard pack.

(a) Fruits shall be fairly uniform in size, unless specified as uniform in size. When packed in boxes or cartons, fruit shall be arranged according to the approved and recognized methods.

(b) All packages shall be tightly packed and well filled but the contents shall not show excessive or unnecessary bruising because of overfilled packages. When grapefruits are packed in cartons or in wire-bound boxes, each container shall be at least level full at time of packing.

(c) ''Fairly uniform in size'' means that not more than the number of fruits permitted in § 51.628, Tables I and II, are outside the ranges of diameters given in the following table:

TABLE III—1⅖ BUSHEL BOX

(Diameter in inches)

Pack size	Minimum	Maximum
46's	4 5/16	5
54's or 56's	4 2/16	4 12/16
64's	3 15/16	4 3/16
70's or 72's	3 13/16	4 5/16
80's	3 10/16	4 2/16
96's	3 6/16	3 14/16
112's or 113's	3 2/16	3 10/16
125's or 126's	3	3 8/16

(d) ''Uniform in size'' means that not more than the number of fruits permitted in § 51.628, Tables I and II, vary more than the following amounts:

(1) 64 size and smaller—not more than six-sixteenths inch in diameter; and,

(2) 54 size and larger—not more than nine-sixteenths inch in diameter.

(e) In order to allow for variations, other than sizing, incident to proper packing, not more than 5 percent of the packages in any lot may fail to meet the requirements of standard pack.

DEFINITIONS

§ 51.631 Mature.

Mature shall have the same meaning currently assigned that term in the laws and regulations of the State in which the grapefruit is grown; or as the definition of such term may hereafter be amended.

§ 51.632 Similar varietal characteristics.

Similar varietal characteristics means that the fruits in any container are similar in color and shape.

§ 51.633 Well colored.

Well colored means that the fruit is yellow in color with practically no trace of green color.

§ 51.634 Firm.

Firm means that the fruit is not soft, or noticeably wilted or flabby, and the skin is not spongy or puffy.

§ 51.635 Well formed.

Well formed means that the fruit has the shape characteristic of the variety.

§ 51.636 Smooth texture.

Smooth texture means that the skin is thin and smooth for the variety and size of the fruit.

§ 51.637 Injury.

Injury means any specific defect described in § 51.652, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which slightly detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.638 Discoloration.

Discoloration means russeting of light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by smooth or fairly smooth, superficial scars or other means may be allowed on a greater area, or darker shades may be allowed

on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed in the grade.

§51.639 Fairly well colored.

Fairly well colored means that except for a 1-inch circle in the aggregate of green color, the yellow color predominates over the green color on that part of the fruit which is not discolored.

§51.640 Fairly well formed.

Fairly well formed means that the fruit may not have the shape characteristic of the variety but is not elongated or pointed or otherwise deformed.

§51.641 Fairly smooth texture.

Fairly smooth texture means that the skin is not materially rough or coarse and that the skin is not thick for the variety.

§51.642 Damage.

Damage means any specific defect described in §51.652, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§51.643 Fairly firm.

Fairly firm means that the fruit may be slightly soft, but not bruised, and the skin is not spongy or puffy.

§51.644 Slightly misshapen.

Slightly misshapen means that the fruit is not of the shape characteristic of the variety but is not appreciably elongated or pointed or otherwise deformed.

§51.645 Slightly rough texture.

Slightly rough texture means that the skin is not smooth or fairly smooth but is not excessively rough or excessively thick, or materially ridged, grooved or wrinkled.

§51.646 Serious damage.

Serious damage means any specific defect described in §51.652, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§51.647 Slightly colored.

Slightly colored means that, except for a 2-inch circle in the aggregate of green color, the portion of the fruit surface which is not discolored shows some yellow color.

§51.648 Misshapen.

Misshapen means that the fruit is decidedly elongated, pointed or flat sided.

§51.649 Slightly spongy.

Slightly spongy means that the fruit is puffy or slightly wilted but not flabby.

§51.650 Very serious damage.

Very serious damage means any specific defect described in §51.652, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§51.651 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end.

§ 51.652 Classification of defects.

TABLE IV

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation	.....	Not occurring as light speck type	Scars are cracked or dark and aggregating more than a circle ¾ inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Buckskin	.....	Aggregating more than a circle 1¼ inches in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanese	.....	.....	Aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Dryness or mushy condition.	.....	Affecting all segments more than ¼ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ½ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ¾ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots or oil spots.	More than slightly affecting appearance.	Aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.	Aggregating more than a circle 1½ inches in diameter on a 70 size grapefruit.	
Hail	Not well healed, or aggregating more than a circle ⅔ inch in diameter on a 70 size grapefruit.	Not well healed, or aggregating more than a circle ½ inch in diameter on a 70 size grapefruit.	Not well healed, or aggregating more than a circle ⅝ inch in diameter on a 70 size grapefruit.	Not well healed, or aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.
Scab	.....	Materially detracts from the shape or texture, or aggregating more than a circle ¾ inch in diameter on a 70 size grapefruit.	Seriously detracts from the shape or texture, or aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Scale	More than a few adjacent to the "button" at the stem end, or more than 6 scattered on other portions of the fruit.	Blotch aggregating more than a circle ¾ inch in diameter, or occurring as a ring more than a circle 1¼ inches in diameter on a 70 size grapefruit.	Blotch aggregating more than a circle 1 inch in diameter, or occurring as a ring more than a circle 1½ inches in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Skin breakdown	.....	Aggregating more than a circle ⅜ inch in diameter on a 70 size grapefruit.	Aggregating more than a circle ⅝ inch in diameter on a 70 size grapefruit.	Aggregating more than a circle 1¼ inches in diameter on a 70 size grapefruit.
Scars	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade..	Very deep or very rough aggregating more than a circle ½ inch in diameter; deep or rough aggregating more than 1 inch in diameter; slightly rough or of slight depth aggregating more than 10 percent of fruit surface. All areas based on a 70 size grapefruit.	Very deep or very rough aggregating more than a circle 1 inch in diameter; deep or rough aggregating more than 5 percent of fruit surface; slight depth or slightly rough aggregating more than 15 percent of fruit surface. All areas based on a 70 size grapefruit.	Very deep or very rough or unsightly that appearance is very seriously affected.
Sprayburn	Hard or aggregating more than a circle 1¼ inches in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.		
Sunburn	Skin is flattened, dry, darkened, or hard, aggregating more than 25 percent of fruit surface.	Skin is hard, fruit is decidedly one-sided, aggregating more than one-third of fruit surface.	Aggregating more than 50 percent of fruit surface.	

Sprouting	More than 6 seeds are sprouted, including not more than 1 sprout extending to the rind, remainder average not over ¼ inch in length.	More than 6 seeds are sprouted, including not more than 2 sprouts extending to the rind, remainder average not over ½ inch in length.	More than 6 seeds are sprouted, including not more than 3 sprouts extending to the rind, remainder average not over ¾ inch in length.	
Thorn scratches	Not well healed, or more unsightly than discoloration permitted in the grade.	Not well healed, hard concentrated thorn injury aggregating more than a circle ¾ inch in diameter, or slight scratches aggregating more than a circle 1 inch in diameter. All areas based on a 70 size grapefruit..	Not well healed, hard concentrated thorn injury aggregating more than a circle ⅞ inch in diameter, or slight scratches aggregating more than a circle 1¼ inches in diameter. All areas based on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.

METRIC CONVERSION TABLE

§ 51.653 Metric conversion table.

Inches	Millimeters (mm)
¼ equals	6.4
⅜ equals	9.5
½ equals	12.7
9/16 equals	14.3
⅝ equals	15.9
¾ equals	19.1
⅞ equals	22.2
1 equals	25.4
1¼ equals	31.8
1½ equals	38.1
3 equals	76.2
3 3/16 equals	79.4
3 6/16 equals	85.7
3 8/16 equals	88.9
3 10/16 equals	92.1
3 13/16 equals	96.8
3 14/16 equals	98.4
3 15/16 equals	100.0
4 3/16 equals	104.8
4 5/16 equals	109.5
4 8/16 equals	114.3
4 12/16 equals	120.7
5 equals	127.0

Subpart—United States Standards for Grades of Oranges (Texas and States Other Than Florida, California, and Arizona)

SOURCE: 34 FR 13909, Aug. 30, 1969; 34 FR 14325, Sept. 12, 1969, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.680 General.

The standards in this subpart apply only to the common or sweet orange group and varieties belonging to the Mandarin group except tangerines for which separate U.S. Standards are issued.

GRADES

§ 51.681 U.S. Fancy.

''U.S. Fancy'' consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(i) Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.700.)

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Well colored;

(6) Well formed; and,

(7) Smooth texture.

(b) Free from:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Cuts not healed;

(7) Decay;

(8) Growth cracks;

(9) Scab;

(10) Skin breakdown;

(11) Sprayburn;

(12) Undeveloped segments; and,

(13) Wormy fruit.

(c) Not injured by:

(1) Green spots;

(2) Oil spots;

(3) Split navels;

(4) Rough, wide or protruding navels;

(5) Scale;

(6) Scars; and,

(7) Thorn scratches.

(d) Not damaged by any other cause.

(e) For tolerances see § 51.689.

§ 51.682 U.S. No. 1.

''U.S. No. 1'' consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(i) Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.700.)

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Well formed;

(6) Fairly smooth texture; and,

(7) Color:

(i) Early and midseason varieties shall be fairly well colored.

(ii) For Valencia and other late varieties, not less than 50 percent, by count, shall be fairly well colored and the remainder reasonably well colored.

(b) Free from:

(1) Bruises;

(2) Cuts not healed;

(3) Caked melanose;

(4) Decay;

(5) Growth cracks;

(6) Sprayburn;

(7) Undeveloped segments; and,

(8) Wormy fruit.

(c) Not damaged by any other cause.

(d) For tolerances see §51.689.

§51.683 U.S. No. 1 Bright.

The requirements for this grade are the same as for U.S. No. 1 except that no fruit may have more than one-tenth of its surface, in the aggregate, affected by discoloration.

(a) For tolerances see §51.689.

§51.684 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No 1 except that all fruit must show some discoloration. Not less than the number of fruits required in §51.689, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on these fruits shall be of rust mite type.

§51.685 U.S. Combination.

''U.S. Combination'' consists of a combination of U.S. No. 1 and U.S. No. 2 oranges: *Provided*, That the number of U.S. No. 2 fruits specified in §51.689, Tables I and II, are not exceeded.

§51.686 U.S. No. 2.

''U.S. No. 2'' consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(i) Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See §51.700.)

(2) Fairly firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Reasonably well colored;

(6) Not more than slightly misshapen, and,

(7) Not more than slightly rough.

(b) Free from:

(1) Bruises;

(2) Cuts not healed;

(3) Decay;

(4) Growth cracks; and,

(5) Wormy fruit.

(c) Not seriously damaged by any other cause.

(d) For tolerances see §51.689.

§51.687 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that not less than the number of fruits required in §51.689, Tables I and II, shall have more than one-half of their surface, in the aggregate, affected by discoloration.

§51.688 U.S. No. 3.

''U.S. No. 3'' consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Mature;

(2) Similar varietal characteristics;

(3) May be misshapen;

(4) May be slightly spongy;

(5) May have rough texture;

(6) Not seriously lumpy or cracked; and,

(7) May be poorly colored.

(i) Not more than 25 percent of the surface may be of a solid dark green color.

(b) Free from:

(1) Cuts not healed;

(2) Decay; and,

(3) Wormy fruit.

(c) Not very seriously damaged by any other cause.

(d) For tolerances see §51.689.

TOLERANCES

§51.689 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, based on sample inspection, the number of defective or off-size specimens in the lot, shall be within the limitations specified in Tables I and II. No tolerance shall apply to wormy fruit.

TABLE I—SHIPPING POINT[1]

(A) FOR 1 THROUGH 20 SAMPLES

[See footnotes at end of Table I]

Factor	Grades	AL[2]	Number of 50-count samples[3]																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Acceptance number (maximum permitted)[4]																					
Decay	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. Combination.	1	0	1	[5]1	1	2	[5]2	2	3	3	3	[5]3	3	4	4	[5]4	4	5	5	5	5
	U.S. No. 3.	2	0	1	2	[5]2	2	[5]3	3	4	4	[5]4	5	5	[5]5	6	6	[5]6	6	7	7	7
Very serious damage including decay.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. Combination.	6	4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37	39	41	43	45
Total defects including decay and very serious damage.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. No. 3.	8	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	U.S. Combination (U.S. No. 2's permitted).	29	26	48	70	91	112	134	155	176	197	218	239	260	281	301	322	343	364	384	405	425
Off-size		10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
Discoloration	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. Combination.	10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	Acceptance number (minimum required)[4]																					
	U.S. No. 1 Bronze. U.S. No. 2 Russet.	1	3	8	12	18	23	29	34	40	45	51	56	62	68	74	79	85	91	97	102 D	108

TABLE I—SHIPPING POINT[1]—Continued

(B) FOR 21 THROUGH 40 SAMPLES

[See footnotes at end of Table I]

Factor	Grades	AL[2]	Number of 50-count samples[3]																			
			21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Acceptance numbers (maximum permitted)[4]																					
Decay	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. Combination.	1	[5]5	6	6	6	6	[5]6	6	7	7	7	7	[5]7	7	8	8	8	[5]8	8	9	9
	U.S. No. 3.	2	8	8	[5]8	8	9	9	[5]9	9	10	10	[5]10	11	11	[5]11	11	12	12	[5]12	12	13
Very serious damage including decay.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. Combination.	6	47	49	51	53	54	56	58	60	62	64	66	68	70	72	74	76	78	80	81	83
Total defects including decay and very serious damage.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. No. 3.	8	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163	167	171	176	180
	U.S. Combination (U.S. No. 2's permitted).	29	446	467	487	508	529	549	570	590	611	631	652	672	693	713	734	754	775	795	816	836
Off-size		10	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163	167	171	176	180
Discoloration	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. Combination.	10	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163	167	171	176	180
	Acceptance number (minimum required)[4]																					
	U.S. No. 1 Bronze. U.S. No. 2 Russet.	1	114	119	125	131	137	143	149	155	161	166	172	178	184	190	196	202	208	214	220	226

[1] Shipping point, as used in these standards, means the point of origin of the shipment in the production area or at port of loading for ship stores or overseas shipments, or in the case of shipments from outside the continental United States, the port of entry into the United States.
[2] AL—Absolute limit permitted in individual 33-count sample.
[3] Sample size—33-count.

[4] Acceptance number—maximum or minimum number of defective or off-size fruit permitted.
[5] Preferred number of samples for this acceptance number.

TABLE II—EN ROUTE OR AT DESTINATION

Factor	Grades	AL [1]	Number of 50-count samples [2]																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Acceptance numbers (maximum permitted)																					
Decay	All.	4	3	4	6	7	9	10	11	13	14	15	16	18	19	20	21	23	24	25	26	27
Very serious damage other than decay.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S Combination.	6	4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37	39	41	43	45
Total defects including very serious damage other than decay.	U.S. Fancy. U.S. No. 1. U.S. No. 2. U.S. No. 3.	8	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	U.S. Combination (U.S. No. 2's permitted).	29	26	48	70	91	112	134	155	176	197	218	239	260	281	301	322	343	364	384	405	425
Off-size		10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
Discoloration	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. Combination.	10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	Acceptance number (minimum required) [3]																					
	U.S. No. 1 Bronze. U.S. No. 2 Russet.	1	3	8	12	18	23	29	34	40	45	51	56	62	68	74	79	85	91	97	102	108

[1] AL—Absolute limit permitted in individual 50-count sample.
[2] Sample size-50-count.
[3] Acceptance number—maximum or minimum number of defective or off-size fruit permitted.

SAMPLE FOR GRADE OR SIZE DETERMINATION

§51.690 Sample for grade or size determination.

Each sample shall consist of 50 oranges. When individual packages contain at least 50 oranges, the sample is drawn from one package; when individual packages contain less than 50 oranges, a sufficient number of adjoining packages are opened to form a 50-count sample. When practicable, at point of packaging, the sample may be obtained from the grading belt or bins after sorting has been completed.

STANDARD PACK

§51.691 Standard pack for oranges except Temple variety.

(a) Fruit shall be fairly uniform in size, unless specified as uniform in size, and shall be place packed in boxes or cartons and arranged according to the approved and recognized methods.

(b) All containers shall be tightly packed and well filled but the contents shall not show excessive or unnecessary bruising because of overfilled containers. When oranges are packed in wire-bound boxes or cartons, each container shall be at least level full at time of packing.

(c) ''Fairly uniform in size'' means that not more than the number of fruits permitted in §51.689, Tables I and II, are outside the ranges of diameters given in the following table.

TABLE III

(When packed in 1⅖ bushel or 7/10 bushel containers)

Size and count in 1⅖ bushel	Count in 7/10 bushel	Diameter in inches	
		Minimum	Maximum
100's	48 or 50	3 7/16	3 13/16
125's	64	3 3/16	3 9/16
163's	80	2 15/16	3 5/16
200's	100	2 11/16	3 1/16
252's	125	2 7/16	2 12/16
288's	144	2 4/16	2 9/16
324's	162	2 3/16	2 8/16

(d) ''Uniform in size'' means that not more than the number of fruits permitted in §51.689, Tables I and II, vary more than the following amounts:

(1) 163 size or smaller—not more than four-sixteenths inch in diameter; and,

(2) 125 size or larger—not more than five-sixteenths inch in diameter.

(e) In order to allow for variations, other than sizing, incident to proper packing, not more than 5 percent of the packages in any lot may fail to meet the requirements of standard pack.

STANDARD SIZING

§51.692 Standard sizing.

(a) Boxes, cartons, bag packs, or bulk loads in which oranges are not packed according to a definite pattern do not meet the requirements of standard pack, but may be certified as meeting the requirements of standard sizing: *Provided,* That the ranges are fairly uniform in size as defined in §51.691: *And provided further,* That when packed in boxes or cartons the contents have been properly shaken down and the container is at least level full at time of packing.

(b) In order to allow for variations incident to proper packing, not more than 5 percent of the containers in any lot may fail to meet the requirements of standard sizing.

DEFINITIONS

§51.693 Mature.

Mature shall have the same meaning currently assigned that term in the laws and regulations of the State in which the orange is grown; or as the definition of such term may hereafter be amended.

§51.694 Similar varietal characteristics.

Similar varietal characteristics means that the fruits in any container are similar in color and shape.

§51.695 Well colored.

Well colored means that the fruit is yellow or orange in color with practically no trace of green color.

§51.696 Firm.

Firm as applied to common oranges, means that the fruit is not soft, or noticeably wilted or flabby; as applied to oranges of the Mandarin group (Satsuma, King, Mandarin), means that the fruit is not extremely puffy, although the skin may be slightly loose.

§ 51.697 Well formed.

Well formed means that the fruit has the shape characteristic of the variety.

§ 51.698 Smooth texture.

Smooth texture means that the skin is thin and smooth for the variety and size of the fruit.

§ 51.699 Injury.

Injury means any specific defect described in § 51.713, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which slightly detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.700 Discoloration.

Discoloration means russeting of light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by smooth or fairly smooth, superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by melanose or other means may affect the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed for the grade.

§ 51.701 Fairly smooth texture.

Fairly smooth texture means that the skin is not materially rough or coarse and that the skin is not thick for the variety.

§ 51.702 Damage.

Damage means any specific defect described in § 51.713, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.703 Fairly well colored.

Fairly well colored means that except for a one inch circle in the aggregate of green color, the yellow or orange color predominates over the green color on that part of the fruit which is not discolored.

§ 51.704 Reasonably well colored.

Reasonably well colored means that the yellow or orange color predominates over the green color on at least two-thirds of the fruit surface in the aggregate which is not discolored.

§ 51.705 Fairly firm.

Fairly firm as applied to common oranges, means that the fruit may be slightly soft, but not bruised; as applied to oranges of the Mandarin group (Satsuma, King, Mandarin) means that the fruit is not extremely puffy or the skin extremely loose.

§ 51.706 Slightly misshapen.

Slightly misshapen means that the fruit is not of the shape characteristic of the variety but is not appreciably elongated or pointed or otherwise deformed.

§ 51.707 Slightly rough texture.

Slightly rough texture means that the skin is not smooth or fairly smooth but is not excessively rough or excessively thick, or materially ridged, grooved or wrinkled.

§ 51.708 Serious damage.

Serious damage means any specific defect described in § 51.713, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.709 Misshapen.

Misshapen means that the fruit is decidedly elongated, pointed or flatsided.

§ 51.710 Slightly spongy.

Slightly spongy means that the fruit is puffy or slightly wilted but not flabby.

§ 51.711 Very serious damage.

Very serious damage means any specific defect described in § 51.713, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§51.712 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end of the fruit.

§ 51.713 Classification of defects.

TABLE IV

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation	.....	Not occurring as light speck type	Scars are cracked or dark and aggregating more than a circle ¾ inch in diameter or light colored and aggregating more than a circle 1¼ inches in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Buckskin	.....	Aggregating more than a circle 1 inch in diameter on a 200 size orange..	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose	.....	.....	Aggregating more than a circle ¾ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Creasing	.....	Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.
Dryness or mushy condition.	.....	Affecting all segments more than ¼ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ½ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ¾ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots or oil spots.	More than slightly affecting appearance	Aggregating more than a circle ⅞ inch in diameter on a 200 size orange.	Aggregating more than a circle 1¼ inches in diameter on a 200 size orange.	
Hail	Not well healed, or aggregating more than a circle ¼ inch in diameter on a 200 size orange.	Not well healed, or aggregating more than a circle ⅜ inch in diameter on a 200 size orange.	Not well healed, or aggregating more than a circle ½ inch in diameter on a 200 size orange.	Not well healed, or aggregating more than a circle ¾ inch in diameter on a 200 size orange.
Scab	.....	Materially detracts from the shape or texture, or aggregating more than a circle ⅝ inch in diameter on a 200 size orange.	Seriously detracts from the shape or texture, or aggregating more than a circle ¾ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Scale	More than a few adjacent to the "button" at the stem end, or more than 6 scattered on other portions of the fruit.	Aggregating more than a circle ⅝ inch in diameter on a 200 size orange.	Aggregating more than a circle ¾ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Scars	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep, rough or hard aggregating more than a circle ¼ inch in diameter; slightly rough with slight depth aggregating more than a circle ⅞ inch in diameter; smooth or fairly smooth with slight depth aggregation more than a circle 1¼ inches in diameter. All areas based on a 200 size orange.	Deep, rough aggregating more than a circle ½ inch in diameter; slightly rough with slight depth aggregating more than a circle 1¼ inches in diameter. All areas based on a 200 size orange.	Deep, rough or unsightly that appearance is very seriously affected.
Skin breakdown	.....	Aggregating more than a circle ¼ inch in diameter on a 200 size orange.	Aggregating more than a circle ⅝ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.

Sunburn	.....	Skin is flattened, dry, darkened or hard, aggregating more than 25 percent of the surface.	Affecting more than ⅓ of the surface, hard, decidedly one-sided, or light brown and aggregating more than a circle 1¼ inches in diameter on a 200 size orange.	Aggregating more than 50 percent of the surface.
Sprayburn	.....	.....	Hard, or aggregating more than a circle 1¼ inches in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Split, rough or protruding navels.	Split is unhealed; navel protrudes beyond general contour; opening is so wide, growth so folded and ridged that it detracts noticeably from appearance.	Split is unhealed, or more than ¼ inch in length, or more than 3 well healed splits, or navel protrudes beyond the general contour, and opening is so wide, folded or ridged that it detracts materially from appearance.	Split is unhealed, or more than ½ inch in length, or aggregate length of all splits exceed 1 inch, or navel protrudes beyond general contour, and opening is so wide, folded and ridged that it seriously detracts from appearance.	Split is unhealed or fruit is seriously weakened.
Thorn scratches	Not slight, not well healed, or more unsightly than discoloration permitted in the grade.	Not well healed, or hard concentrated thorn injury aggregating more than a circle ⅝ inch in diameter on a 200 size orange.	Not well healed, or hard concentrated thorn injury aggregating more than a circle ¾ inch in diameter on a 200 size orange.	Aggregating more than 5 percent of the surface.

METRIC CONVERSION TABLE

§ 51.714 Metric conversion table.

Inches	Millimeters (mm)
¼ equals	6.4
5/16 equals	7.9
⅜ equals	9.5
½ equals	12.7
⅝ equals	15.9
¾ equals	19.1
⅞ equals	22.2
1 equals	25.4
1¼ equals	31.8
2 3/16 equals	55.6
2 4/16 equals	57.2
2 7/16 equals	61.9
2 8/16 equals	63.5
2 9/16 equals	65.1
2 11/16 equals	68.3
2 12/16 equals	69.9
2 15/16 equals	74.6
3 1/16 equals	77.8
3 3/16 equals	81.0
3 5/16 equals	84.1
3 7/16 equals	87.3
3 9/16 equals	90.5
3 13/16 equals	96.8

Subpart—United States Standards for Grades of Florida Grapefruit

SOURCE: 61 FR 20703, May 8, 1996, unless otherwise noted.

GRADES

§ 51.750 U.S. Fancy.

''U.S. Fancy'' consists of grapefruit which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.770.);

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Smooth texture;

(6) Well colored; and,

(7) Well formed.

(b) Free from:

(1) Ammoniation;

(2) Buckskin;

(3) Caked melanose;

(4) Decay;

(5) Scab;

(6) Sprayburn;

(7) Unhealed skin breaks; and,

(8) Wormy fruit.

(c) Free from injury caused by:

(1) Bruises;

(2) Green spots;

(3) Oil spots;

(4) Scale;

(5) Scars;

(6) Skin breakdown; and,

(7) Thorn scratches.

(d) Free from damage caused by:

(1) Dirt or other foreign material;

(2) Disease;

(3) Dryness or mushy condition;

(4) Hail;

(5) Insects;

(6) Sprouting;

(7) Sunburn; and,

(8) Other means.

(e) For tolerances see § 51.760.

§ 51.751 U.S. No. 1 Bright.

The requirements for this grade are the same as for U.S. No. 1 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration. For tolerances see § 51.760.

§ 51.752 U.S. No. 1.

''U.S. No. 1'' consists of grapefruit which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.770.);

(2) Fairly smooth texture;

(3) Fairly well colored;

(4) Firm;

(5) Mature;

(6) Similar varietal characteristics; and,

(7) Well formed.

(b) Free from:

(1) Decay;

(2) Unhealed skin breaks; and,

(3) Wormy fruit.

(c) Free from damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Dirt or other foreign material;

(6) Disease;

(7) Dryness or mushy condition;

(8) Green spots;

(9) Hail;

(10) Insects;

(11) Oil spots;

(12) Scab;

(13) Scale;

(14) Scars;
(15) Skin breakdown;
(16) Sprayburn;
(17) Sprouting;
(18) Sunburn;
(19) Thorn scratches; and,
(20) Other means.
(d) For tolerances see §51.760.

§51.753 U.S. No. 1 Golden.

The requirements for this grade are the same as for U.S. No. 1 except that not more than 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration. For tolerances see §51.760.

§51.754 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on each of these fruits shall be of rust mite type. For tolerances see §51.760.

§51.755 U.S. No. 1 Russet.

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration. For tolerances see §51.760.

§51.756 U.S. No. 2 Bright.

The requirements for this grade are the same as for U.S. No. 2 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration. For tolerances see §51.760.

§51.757 U.S. No. 2.

''U.S. No. 2'' consists of grapefruit which meet the following requirements:
(a) Basic requirements:
(1) Discoloration: Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See §51.770.);
(2) Fairly firm;
(3) Mature;
(4) Similar varietal characteristics;
(5) Slightly colored;
(6) Not more than slightly misshapen; and,
(7) Not more than slightly rough texture.
(b) Free from:
(1) Decay;
(2) Unhealed skin breaks; and,
(3) Wormy fruit.
(c) Free from serious damage caused by:
(1) Ammoniation;
(2) Bruises;
(3) Buckskin;
(4) Caked melanose;
(5) Dirt or other foreign material;
(6) Disease;
(7) Dryness or mushy condition;
(8) Green spots;
(9) Hail;
(10) Insects;
(11) Oil spots;
(12) Scab;
(13) Scale;
(14) Scars;
(15) Skin breakdown;
(16) Sprayburn;
(17) Sprouting;
(18) Sunburn;
(19) Thorn scratches; and,
(20) Other means.
(d) For tolerances see §51.760.

§51.758 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that at least 10 percent of the fruit shall have more than one-half of their surface, in the aggregate, affected by any type of discoloration. For tolerances see §51.760.

§51.759 U.S. No. 3.

''U.S. No. 3'' consists of grapefruit which meet the following requirements:
(a) Basic requirements:
(1) Mature;
(2) Misshapen;
(3) Poorly colored;
(4) Rough texture, not seriously bumpy;
(5) Similar varietal characteristics; and,
(6) Slightly spongy.
(b) Free from:
(1) Decay;
(2) Unhealed skin breaks; and,
(3) Wormy fruit.

(c) Free from very serious damage caused by:

(1) Ammoniation;
(2) Bruises;
(3) Buckskin;
(4) Caked melanose;
(5) Disease;
(6) Dryness or mushy condition;
(7) Hail;
(8) Insects;
(9) Oil spotting;
(10) Scab;
(11) Scale;
(12) Scars;
(13) Skin breakdown;
(14) Sprayburn;
(15) Sprouting;
(16) Sunburn; and,
(17) Other means.

(d) For tolerances see § 51.760.

TOLERANCES

§ 51.760 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, based on a minimum 25 count sample, are provided as specified:

(a) *Defects.* (1) U.S. Fancy, U.S. No. 1 Bright, U.S. No. 1, U.S. No. 1 Golden, U.S. No. 1 Bronze, U.S. No. 1 Russet, U.S. No. 2 Bright, U.S. No. 2, and U.S. No. 2 Russet.

(i) *For defects at shipping point.*[1] Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the specified grade: *Provided,* that included in this amount not more than 5 percent shall be allowed for defects causing very serious damage, including in this latter amount not more than 1 percent for decay or wormy fruit.

(ii) *For defects en route or at destination.* Not more than 12 percent of the fruit which fail to meet the requirements of the specified grade: *Provided,* that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

(B) 7 percent for defects causing very serious damage, including therein not more than 5 percent for very serious damage by permanent defects and not more than 3 percent for decay or wormy fruit.

(2) U.S. No. 3.

(i) *For defects at shipping point.*[1] Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the grade: *Provided,* that included in this amount not more than 1 percent shall be for decay or wormy fruit.

(ii) *For defects en route or at destination.* Not more than 12 percent of the fruit which fail to meet the requirements of the grade: *Provided,* that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

(B) 3 percent for decay or wormy fruit.

(b) *Discoloration*—(1) *U.S. No. 1 Bright, U.S. No. 1, U.S. No. 2 Bright, and U.S. No. 2.* Not more than 10 percent of the fruit in any lot may fail to meet the requirements relating to discoloration as specified in each grade. No sample may have more than 20 percent of the fruit with excessive discoloration: *And provided further,* that the entire lot averages within percentage specified.

(2) *U.S. No. 1 Golden.* Not more than 30 percent of the fruit shall have in excess of one-third of their surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to increase this percentage. No sample may have more than 40 percent of the fruit with excessive discoloration: *And provided further,* that the entire lot averages within the percentage specified.

(3) *U.S. No. 1 Bronze, and U.S. No. 1 Russet.* At least 30 percent of the fruit shall have in excess of one-third of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage. No sample may have less than 20 percent of the fruit with required discoloration: *And provided further,* that the entire lot averages within the percentage specified.

[1] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

(4) *U.S. No. 2 Russet.* At least 10 percent of the fruit shall have in excess of one-half of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage: *And provided further,* that the entire lot averages within the percentage specified.

[61 FR 20703, May 8, 1996, as amended at 61 FR 40290, Aug. 2, 1996]

APPLICATION OF TOLERANCES

§51.761 Application of tolerances.

Individual samples are subject to the following limitations, unless otherwise specified in §51.760. Individual samples shall have not more than one and one-half times a specified tolerance of 10 percent or more, and not more than double a specified tolerance of less than 10 percent: *Provided,* that at least one decayed or wormy fruit may be permitted in any sample: And *provided further,* that the averages for the entire lot are within the tolerances specified for the grade.

[61 FR 40290, Aug. 2, 1996]

SIZE

§51.762 Size.

(a) Fruits shall be fairly uniform in size and shall be packed in containers according to approved and recognized methods.

(b) ''Fairly uniform in size'' means that not more than 10 percent of the grapefruit per sample may vary more than one-half inch in diameter.

(c) In order to allow for variations incident to proper sizing, not more than 10 percent of the samples in any lot may fail to meet the requirements of size.

DEFINITIONS

§51.763 Similar varietal characteristics.

Similar varietal characteristics means that the fruits in any container are similar in color and shape.

§51.764 Well colored.

Well colored means that the fruit has characteristic color for the variety with practically no trace of green color.

§51.765 Firm.

Firm means that the fruit is not soft, or noticeably wilted or flabby, and the skin is not spongy or puffy.

§51.766 Well formed.

Well formed means that the fruit has the shape characteristic of the variety.

§51.767 Mature.

Mature shall have the same meaning assigned the term in the Florida Citrus Code, Chapter 601, 1995 Edition, and the Official Rules Affecting the Florida Citrus Industry, in effect as of February 12, 1995. These grapefruit maturity requirements are contained in the Florida Citrus Code, Chapter 601, Florida Statutes, Sections 601.16, 601.17, and 601.18, 1995 Edition, and the State of Florida Department of Citrus Official Rules Affecting the Florida Citrus Industry, Part 1, Chapter 20–13 Market Classification, Maturity Standards and Processing or Packing Restrictions for Hybrids in effect as of February 12, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from, Florida Department of Citrus, Post Office Box 148, Lakeland, Florida 33802 or copies of both regulations may be inspected at USDA, AMS, F&VD, FPB, Standardization Section, Room 2065–S, 14th and Independence Ave., Washington, DC 20250 or at the Office of the Federal Register, Suite 700, 800 North Capitol Street, Washington, DC.

§51.768 Smooth texture.

Smooth texture means that the skin is thin and smooth for the variety and size of the fruit. ''Thin'' means that the skin thickness does not average more than ⅜ inch (9.5 mm), on a central cross section, on grapefruit 4⅛ inches (104.8 mm) in diameter.

§51.769 Injury.

Injury means any specific defect described in §51.784, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which slightly detracts from the appearance, or the

edible or marketing quality of the fruit.

§ 51.770 Discoloration.

Discoloration means russeting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by smooth or fairly smooth superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck-type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed in the grade.

§ 51.771 Fairly well colored.

Fairly well colored means that except for an aggregate area of green color which does not exceed the area of a circle 1 inch (25.4 mm) in diameter, the characteristic color predominates over the green color.

§ 51.772 Fairly smooth texture.

Fairly smooth texture means that the skin is fairly thin and not coarse for the variety and size of the fruit. ''Fairly thin'' means that the skin thickness does not average more than ½ inch (12.7 mm), on a grapefruit 4⅛ inches (104.8 mm) in diameter.

§ 51.773 Damage.

Damage means any specific defect described in § 51.784, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.774 Fairly firm.

Fairly firm means that the fruit may be slightly soft, but not bruised, and the skin is not spongy or puffy.

§ 51.775 Slightly misshapen.

Slightly misshapen means that the fruit has fairly good shape characteristic of the variety and is not more than slightly elongated or pointed or otherwise deformed.

§ 51.776 Slightly rough texture.

Slightly rough texture means that the skin may be slightly thick but not excessively thick, materially ridged or grooved. ''Slightly thick'' means that the skin thickness does not average more than ⅝ inch (15.9 mm), on a central cross section, on a grapefruit 4⅛ inches (104.8 mm) in diameter.

§ 51.777 Serious damage.

Serious damage means any specific defect described in § 51.784, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.778 Slightly colored.

Slightly colored means that except for an aggregate area of green color which does not exceed the area of a circle 2 inches (50.8 mm) in diameter, the fruit surface shows some characteristic color.

§ 51.779 Poorly colored.

Poorly colored means that not more than 25 percent of the surface may be of a solid dark green color.

§ 51.780 Misshapen.

Misshapen means that the fruit is decidedly elongated, pointed, or flatsided.

§ 51.781 Slightly spongy.

Slightly spongy means that the fruit is puffy or slightly wilted but not flabby.

§ 51.782 Very serious damage.

Very serious damage means any specific defect described in § 51.784, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.783 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end.

§ 51.784 Classification of defects.

TABLE I

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation		Not occurring as light speck type.	Scars are cracked or dark and aggregating more than a circle 1 inch (25.4 mm) in diameter.	Aggregating more than 25 percent of the surface.
Bruises	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Fruit is split open, peel is badly watersoaked, or rag is ruptured and juice sacs are ruptured causing a mushy condition affecting all segments more than ¾ inch (19.1 mm) at bruised area or the equivalent of this amount, by volume, when affecting more than one area on the fruit.
Buckskin		Aggregating more than a circle 1–¼ inches (31.8 mm) in diameter.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose		Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than a circle 1 inch (25.4 mm) in diameter.	Aggregating more than 25 percent of the surface.
Dryness or mushy condition.		Affecting all segments more than ¼ inch (6.4 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ½ inch (12.7 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than 3/4 inch (19.1 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots	Aggregating more than a circle ½ inch (12.7 mm) in diameter, caused by scale.	Aggregating more than a circle ¾ inch (19.1 mm) in diameter, caused by scale.	Aggregating more than a circle 1 inch (25.4 mm) in diameter, caused by scale.	Aggregating more than 1/3 of the surface, caused by scale.
Oil spots	Aggregating more than a circle ½ inch (12.7 mm) in diameter.	Aggregating more than a circle 1 inch (25.4 mm) in diameter.	Aggregating more than a circle 1½ inches (38.1 mm) in diameter.	Aggregating more than ⅓ of the surface.
Scab		Materially detracts from the shape or texture, or aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Seriously detracts from the shape or texture, or aggregating more than a circle 7/8 inch (22.2 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scale	More than a few adjacent to the ''button'' at the stem end, or more than 6 scattered on other portions of the fruit.	Blotch aggregating more than a circle ¾ inch (19.1 mm) in diameter, or occurring as a ring more than a circle 1¾ inches (31.8 mm) in diameter.	Blotch aggregating more than a circle 1 inch (25.4 mm) in diameter, or occurring as a ring more than a circle 1½ inches (38.1 mm) in diameter..	Aggregating more than 25 percent of the surface.

TABLE I—Continued

Factor	Injury	Damage	Serious damage	Very serious damage
Scars, Hail, or Thorn scratches [For smooth or fairly smooth superficial scars see § 51.770.].	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Very deep or very rough aggregating more than a circle ½ inch (12.7 mm) in diameter; deep or rough aggregating more than a circle 1 inch (25.4 mm) in diameter; slightly rough or of slight depth aggregating more than 10 percent of fruit surface.	Very deep or very rough aggregating more than a circle 1 inch (25.4 mm) in diameter; deep or rough aggregating more than 5 percent of fruit surface; slight depth or slightly rough aggregating more than 15 percent of fruit surface.	Very deep or very rough or unsightly that appearance is very seriously affected.
Skin breakdown	Aggregating more than a circle ⅜ inch (9.5 mm) in diameter.	Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than a circle 1 inch (25.4 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sprayburn		Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Hard and aggregating more than a circle 1½ inches (38.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sprouting		More than six seeds have sprouts of more than ¼ inch (6.4 mm) in length, or more than 3 seeds with sprouts over ¾ inch (19.1 mm) in length.	More than six seeds have sprouts of more than ½ inch (12.7 mm) in length, or more than 3 seeds with sprouts over 1 inch (25.4 mm) in length.	More than six seeds have sprouts of more than ¾ inch (19.1 mm) in length, or more than 3 seeds with sprouts over 1¼ inches (31.8 mm) in length.
Sunburn		Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.

Note: All references to area or aggregating area, or length in this standard are based on a grapefruit 4⅛ inches (104.8 mm) in diameter, allowing proportionately greater areas on larger fruit and lesser areas on smaller fruit.

Subpart—U.S. Standards for Grades of Table Grapes (European or Vinifera Type)[1]

GRADES

§ 51.880 U.S. Extra Fancy Table.

''U.S. Extra Fancy Table'' consists of bunches of well developed grapes of one variety, except when designated as assorted varieties, which are uniform in appearance, well colored, and which meet the following requirements:

(a) Basic requirements for berries:

(1) Mature;

(2) Firm;

(3) Firmly attached to capstem;

(4) Not weak;

(5) Not shriveled at capstem;

(6) Not shattered;

(7) Not split or crushed;

(8) Not wet.

(b) Basic requirements for bunches:

(1) Fairly well filled;

(2) Not excessively tight for the variety.

(c) Basic requirements for stems:

(1) Well developed and strong;

(2) Not dry and brittle;

(3) At least yellowish-green in color except for Cardinal, Robin, Exotic, and Beauty Seedless varieties.

(d) Berries free from:

(1) Decay;

(2) Waterberry;

(3) Sunburn;

(4) Almeria Spot.

(e) Stems free from:

(1) Mold;

(2) Decay.

(f) Berries not damaged by:

(1) Any other cause.

(g) Bunches not damaged by:

(1) Shot berries;

(2) Dried berries;

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

(3) Other defective berries;
(4) Trimming away of defective berries;
(5) Any other cause.
(h) Stems not damaged by:
(1) Freezing;
(2) Any other cause.
(i) Size:
(1) For berries: Exclusive of shot berries and dried berries, not less than 90 percent, by count, of the berries on each bunch shall have the minimum diameters indicated for varieties as follows:
(i) Ribier, Cardinal, Robin, Exotic, Queen, Italia Muscat, and other similar varieties thirteen-sixteenths of an inch.
(ii) Other varieties eleven-sixteenths of an inch.
(2) For bunches:
(i) Not less than one-half pound.
(j) For tolerances see §51.886.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 56 FR 15802, Apr. 18, 1991]

§51.881 U.S. Extra Fancy Export.

''U.S. Extra Fancy Export'' consists of grapes which meet the requirements for U.S. Extra Fancy Table and, in addition, meet the packaging requirements set forth in §51.911.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§51.882 U.S. Fancy Table.

''U.S. Fancy Table'' consists of bunches of well developed grapes of one variety, except when designated as assorted varieties, which are at least reasonably well colored, uniform in appearance when so specified in connection with the grade, and which meet the following requirements:
(a) Basic requirements for berries:
(1) Mature;
(2) Firm;
(3) Firmly attached to capstem;
(4) Not weak;
(5) Not shriveled at capstem;
(6) Not shattered;
(7) Not split or crushed;
(8) Not wet.
(b) Basic requirements for bunches:
(1) Fairly well filled;
(2) Not excessively tight for the variety.
(c) Basic requirements for stems:
(1) Well developed and strong;
(2) Not dry and brittle.
(d) Berries free from:
(1) Decay;
(2) Waterberry;
(3) Sunburn;
(4) Almeria Spot.
(e) Stems free from:
(1) Mold;
(2) Decay.
(f) Berries not damaged by:
(1) Any other cause.
(g) Bunches not damaged by:
(1) Shot berries;
(2) Dried berries;
(3) Other defective berries;
(4) Trimming away of defective berries;
(5) Any other cause.
(h) Stems not damaged by:
(1) Freezing;
(2) Any other cause.
(i) Size:
(1) For berries: Exclusive of shot berries and dried berries, the following percentages, by count, of the berries on each bunch shall have the minimum diameters indicated for varieties as follows:
(i) For Ribier, Cardinal, Robin, Exotic, Queen, Italia Muscat, and other similar varieties, 90 percent shall be at least twelve-sixteenths of an inch;
(ii) For Thompson Seedless, Perlette, Delight, Beauty Seedless, Superior Seedless, Flame Seedless and other seedless varieties, 75 percent shall be at least ten-sixteenths of an inch; and,
(iii) For other varieties 90 percent shall be at least ten-sixteenths of an inch.
(2) For bunches:
(i) Not less than one-fourth pound.
(j) For tolerances see §51.886.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 48 FR 19350, Apr. 29, 1983; 56 FR 15802, Apr. 18, 1991]

§51.883 U.S. Fancy Export.

''U.S. Fancy Export'' consists of grapes which meet the requirements for U.S. Fancy Table, except that bunches shall weigh not less than one-half pound, and in addition meet the

packaging requirements set forth in § 51.912.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 56 FR 15802, Apr. 18, 1991]

§ 51.884 U.S. No. 1 Table.

''U.S. No. 1 Table'' consists of bunches of well developed grapes of one variety, except when designated as assorted varieties, which are at least fairly well colored, uniform in appearance when so specified in connection with the grade, and which meet the following requirements:

(a) Basic requirements for berries:
(1) Mature;
(2) Firm;
(3) Firmly attached to capstem;
(4) Not weak;
(5) Not materially shriveled at capstem;
(6) Not shattered;
(7) Not split or crushed;
(8) Not wet.
(b) Basic requirements for bunches:
(1) Not straggly.
(c) Basic requirements for stems:
(1) Not weak, or dry and brittle.
(d) Berries free from:
(1) Decay;
(2) Waterberry;
(3) Sunburn.
(e) Stems free from:
(1) Mold;
(2) Decay.
(f) Berries not damaged by:
(1) Any other cause.
(g) Bunches not damaged by:
(1) Shot berries;
(2) Dried berries;
(3) Other defective berries;
(4) Trimming away of defective berries;
(5) Any other cause.
(h) Stems not damaged by:
(1) Freezing;
(2) Any other cause.
(i) Size:
(1) For berries: Exclusive of shot berries and dried berries, 75 percent, by count, of the berries on each bunch shall have the minimum diameters indicated for varieties as follows:
(i) Thompson Seedless, Perlette, Delight, Beauty Seedless, Superior Seedless, Flame Seedless and other seedless varieties nine-sixteenths of an inch.
(ii) Other varieties ten-sixteenths of an inch.
(2) For bunches:
(i) Not less than one-fourth pound.
(j) For tolerances see § 51.886.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 48 FR 19350, Apr. 29, 1983; 56 FR 15802, Apr. 18, 1991]

§ 51.885 U.S. No. 1 Institutional.

''U.S. No. 1 Institutional'' grapes must have no less than 95 percent of the containers in the lot legibly marked ''Institutional Pack.'' Further requirements for this grade include grapes which consist of clusters and/or bunches of well developed grapes of one variety, except when designated as assorted varieties, which are at least fairly well colored, uniform in appearance when so specified in connection with the grade, and which meet the following requirements:

(a) Basic requirements for berries:
(1) Mature;
(2) Firm;
(3) Firmly attached to capstem;
(4) Not weak;
(5) Not materially shriveled at capstem;
(6) Not shattered;
(7) Not split or crushed;
(8) Not wet.
(b) Basic requirements for stems: Not weak, or dry and brittle.
(c) Berries free from:
(1) Decay;
(2) Waterberry;
(3) Sunburn.
(d) Stems free from:
(1) Mold;
(2) Decay.
(e) Berries not damaged by: Any other cause.
(f) Bunches not damaged by:
(1) Shot berries;
(2) Dried berries;
(3) Other defective berries;
(4) Any other cause.
(g) Stems not damaged by:
(1) Freezing;
(2) Any other cause.
(h) Size:
(1) For berries: Exclusive of shot berries and dried berries, 75 percent, by count, of the berries on each bunch

shall have the minimum diameters indicated for varieties as follows:

(i) Thompson Seedless, Perlette, Delight, Beauty Seedless, Superior Seedless, Flame Seedless and other seedless varieties nine-sixteenths of an inch.

(ii) Other varieties ten-sixteenths of an inch.

(2) For clusters/bunches: In this grade grapes shall consist of at least a two berry cluster ranging to clusters and/or bunches of grapes not greater than five ounces in weight. See Section 51.913.

(i) For tolerances see Section 51.886.

[61 FR 11126, Mar. 19, 1996]

TOLERANCES

§ 51.886 Tolerances.

(a) No tolerances are provided in these standards for grapes which fail to meet the applicable maturity requirements other than the allowances specified in § 51.888 or in the sampling and testing procedures of State maturity regulations.

(b) In order to allow for variations incident to proper grading and handling in each of the foregoing grades except U.S. No. 1 Institutional, tolerances, by weight, other than for maturity, are provided as set forth in Tables I and II.

TABLE I—TOLERANCES AT SHIPPING POINT [1]

[Percent]

Factor	U.S. Extra fancy table	U.S. Fancy table	U.S. No. 1 table
(A) For bunches failing to meet color requirements	10	10	10
(B) For bunches failing to meet requirements for minimum diameter of berries	10	10	10
(C) For bunches failing to meet stem color requirements	10	.....	.....
(D) For offsize bunches and for bunches and berries failing to meet the remaining requirements for the grade	8	8	8
Including in (D):			
(a) For serious damage	2	2	2
And, including in (a):			
(i) For decay	½ of 1	½ of 1	½ of 1

[1] Shipping Point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

TABLE II—TOLERANCES EN ROUTE OR AT DESTINATION

(A) For bunches failing to meet color requirements	10	10	10
(B) For bunches failing to meet requirements for minimum diameter of berries	10	10	10
(C) For bunches failing to meet stem color requirements	10	.....	.....
(D) For offsize bunches and for bunches and berries failing to meet the remaining requirements for the grade	12	12	12
Including in (D):			
(a) For permanent defects	8	8	8
(b) For serious damage	4	4	4
And, including in (b):			
(i) For serious damage by permanent defects	2	2	2
(ii) For decay	1	1	1

(c) In order to allow for variations incident to proper grading and handling in the U.S. No. 1 Institutional grade only, tolerances, by weight, other than for maturity, are provided as set forth in Tables Ia and IIa of this section.

TABLE IA.—TOLERANCES AT SHIPPING POINT FOR U.S. NO. 1 INSTITUTIONAL GRADE ONLY [1]

[Percent]

Factor	U.S. No. 1 institutional
(A) For clusters/bunches failing to meet color requirements.	10.
(B) For clusters/bunches failing to meet requirements for minimum diameter of berries.	10.
(C) For offsize clusters/bunches	4.

TABLE IA.—TOLERANCES AT SHIPPING POINT FOR U.S. NO. 1 INSTITUTIONAL GRADE ONLY [1]—Continued

[Percent]

Factor	U.S. No. 1 institutional
(D) For clusters/bunches and berries failing to meet the remaining requirements for the grade.	8.
Including in (D):	
(a) For serious damage	2
And, including in (a):	
(i) For decay	½ of 1.

[1]Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

TABLE IIA.—TOLERANCES EN ROUTE OR AT DESTINATION FOR U.S. NO. 1 INSTITUTIONAL GRADE ONLY

Factor	U.S. No. 1 institutional
(A) For clusters/bunches failing to meet color requirements	10.
(B) For clusters/bunches failing to meet requirements for minimum diameter of berries	10.
(C) For offsize clusters/bunches	4.
(D) For clusters/bunches and berries failing to meet the remaining requirements for the grade	12.
Including in (D):	
(a) For permanent defects	8.
(b) For serious damage	4.
And, including in (b):	
(i) For serious damage by permanent defects	2.
(ii) For decay	1.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 52 FR 22437, June 12, 1987. Redesignated and amended at 56 FR 15802, Apr. 18, 1991; 61 FR 11127, Mar. 19, 1996]

APPLICATION OF TOLERANCES

§ 51.887 Application of tolerances.

The contents of the individual packages in any lot, based on sample inspection, are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(a) For tolerances of 10 percent or more, individual packages may contain not more than one and one-half times the specified tolerance.

(b) For a tolerance of less than 10 percent, individual packages may contain not more than double the specified tolerance.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

MATURITY REQUIREMENTS

§ 51.888 Maturity requirements.

(a) In the case of grapes grown in Arizona or California, ''mature'' means grapes in any lot shall meet the maturity requirements for the variety as set forth in the applicable State Agricultural Laws and Regulations referenced in this section. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from, in the case of Arizona maturity regulations, Arizona Department of Agriculture, Citrus, Fruit and Vegetable Standardization, 1688 W. Adams, Phoenix, AZ 85007 or in the case of California maturity regulations, California Department of Food and Agriculture, Fruit and Vegetable Quality Control, Standardization Section, 1220 N Street, P.O. Box 942871, Sacramento, California 94271–0001 or copies of both regulations may be inspected at USDA, AMS, F&VD, FPB, Standardization Section, Room 2065–S, 14th and Independence Avenue, Washington, DC 20250 or at the Office of the Federal Register, Suite 700, 800 North Capitol, Washington, DC.

(1) Arizona maturity regulations are contained in Chapter 4—Plant Services Division, Article 7, Fruit And Vegetable Standardization, Section R3–4–733 Table Grape Standards, Effective January 6, 1994.

(2) California maturity regulations are contained in The California Code of Regulations, Title 3, Subchapter 4. Fresh Fruits, Nuts and Vegetables, Article 25, Table Grapes and Raisins, February 28, 1992.

(b) Grapes subject to U.S. import regulations shall meet the maturity requirements specified in such regulations.

(c) Grapes produced in States other than Arizona or California, or grapes imported from countries outside the United States during periods in which U.S. import regulations do not apply,

shall meet the minimum percentage of soluble solids set forth in Table III as determined by use of a standard hand refractometer.

TABLE III

Variety	Percent of soluble solids
Muscat	17.5
All varieties not listed in this table	16.5
Cardinal, Emperor, Perlette, Ribier, Olivette Blanche, Rish Baba, Red Malaga, and similar varieties	15.5

(1) The minimum percentage of soluble solids for any lot shall be determined from the juice of at least 10 percent, by weight, of whole bunches of the least mature grapes in that container which appears to have the least mature grapes. No lot shall be considered as failing to meet these requirements unless samples from two containers which appear to have the least mature grapes test below the required percentage of soluble solids.

[48 FR 19350, Apr. 29, 1983, as amended at 52 FR 22437, June 12, 1987. Redesignated at 56 FR 15802, Apr. 18, 1991; 61 FR 11127, Mar. 19, 1996]

DEFINITIONS

§51.889 Well developed grapes.

Well developed grapes means grapes which are not abnormally small for the variety.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.890 One variety.

One variety means that the grapes show similar varietal characteristics.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.891 Uniform in appearance.

Uniform in appearance means that not more than one-tenth of the containers in any lot show sufficient variation in color or size of berries to materially detract from the appearance of the contents of the individual container, and that the stems are well developed and strong.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.892 Color terms.

The color terms *well colored*, *reasonably well colored*, and *fairly well colored* are defined in Table IV.

TABLE IV

Color terms	Black varieties	Red varieties	White varieties
Well colored (U.S. Extra Fancy).	Each bunch shall have not less than 95 percent, by count, of berries showing good characteristic color.[1]	Each bunch shall have not less than 75 percent, by count, of berries showing good characteristic color.[1]	No requirement.
Reasonably well colored (U.S. Fancy).	Each bunch shall have not less than 85 percent, by count, of berries showing good characteristic color.[1]	Each bunch shall have not less than 66⅔ percent, by count, of berries showing good characteristic color[1] except the Tokay and Cardinal varieties shall have not less than 75 percent, by count, of berries showing characteristic color.[2]	No requirement.
Fairly well colored (U.S. No. 1).	Each bunch shall have not less than 75 percent, by count, of berries showing characteristic color.[2]	Each bunch shall have not less than 60 percent, by count, of berries showing characteristic color.[2]	No requirement.

[1] Good characteristic color for black varieties means purple to black except that Ribier or similar varieties of grapes shall have at least two-thirds of the surface of the berry showing purple to black color.

For red varieties good characteristic color means at least two-thirds of the surface of the berry is light red through dark red color; except, for the Tokay variety pink through dark red, and for the Cardinal variety light red through purple shall be permitted.

[2] Characteristic color for black varieties means reddish-purple to black except that Ribier or similar varieties of grapes shall have at least two-thirds of the surface of the berry showing reddish-purple to black color.

For red varieties characteristic color means at least two-thirds of the surface of the berry is pink to dark red; except, for the Tokay variety light pink through dark red and for the Cardinal variety light pink through purple color shall be permitted.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.893 Firm.

Firm means that the berry does not yield more than slightly to moderate pressure and is not flabby or wilted.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.894 Weak.

Weak means that individual berries are somewhat translucent, watery and soft, may have relatively low sugar content, inferior flavor, or are of poor keeping quality.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.895 Shriveled at capstem.

Shriveled at capstem means that the berry shows more than slight wrinkling of the skin surrounding the capstem.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.896 Shattered.

Shattered means that the berry is separated from the bunch and may or may not have the capstem attached.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.897 Wet.

Wet means that the grapes are wet from moisture from crushed, leaking, or decayed berries or from rain. Grapes which are moist from dew or other moisture condensation such as that resulting from removing grapes from a refrigerator car or cold storage to a warmer location shall not be considered as wet.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.898 Decay.

Decay means any soft breakdown of the flesh or skin of the berry resulting from bacterial or fungus infection. Slight surface development of green mold (Cladosporium) shall not be considered decay.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.899 Waterberry.

Waterberry means a watery, soft, or flabby condition of the berry. Affected berries are low in sugar content, have tender skins, and are easily crushed. This is an advanced or more pronounced stage of the condition referred to as ''weak''.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated 56 FR 15802, Apr. 18, 1991]

§ 51.900 Sunburn.

Sunburn means injury to the berry caused by exposure to the sun, including ''sulphur burn,'' usually occurring as a sunken and discolored or dried area on the exposed surface.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.901 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, or any other defect, or any combination of defects which materially detracts from the appearance, or the edible or marketing quality of the individual berry, the appearance of the bunch as a whole, or the marketing quality of the stems.

(a) The following shall be considered as damage to the individual berry:

(1) Scarring such as that caused by thrips, mildew, rubs, and similar injuries when materially detracting from the appearance of the berry;

(2) Discoloration when any light brown, tan, or darker discoloration of the skin materially detracts from the appearance of the berry: *Provided,* That ''sunkissed'' berries of the white Malaga variety which show discoloration of amber or light brown color shall not be considered as damaged. ''Buckskin'' berries of the Tokay variety, and similar injury to other varieties, shall be considered as damaged by discoloration;

(3) Heat when the flesh of the berry is affected;

(4) Almeria Spot when any spot is distinctly sunken or dark in color;

(5) Mildew when active powdery mildew is present;

(6) Freezing when the berry is frozen or when the flesh of the berry is affected by freezing;

(7) Insect injury when penetrating the skin of the berry or when there is noticeable insect infestation on the bunch; when mealybug residue or aphis honeydew are present in noticeable amounts; or when leafhopper residue materially detracts from the appearance of the individual berry or of the bunch.

(b) The following shall be considered as damage to stems:

(1) Active powdery mildew or any other disease when present on the stems to the extent that it detracts from the appearance of the bunch or when scars caused by mildew or other disease constrict or weaken any part of the main or lateral stems; and,

(2) Freezing when the stems are frozen or the capstems are swollen or dried, or when the main or lateral stems are water-soaked and limp, or dried, as a result of freezing.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.902 Fairly well filled.

Fairly well filled means that the berries are reasonably closely spaced on main and lateral stems and that the bunch is not very loose or stringy.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.903 Excessively tight.

Excessively tight means that the berries are so wedged together that the bunch is extremely compact for the variety and resulting distorted berries materially detract from the appearance of the bunch.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.904 Shot berries.

Shot berries means very small berries resulting from insufficient pollination, usually seedless in those varieties which normally develop seeds.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.905 Dried berries.

Dried berries means berries which are dry and shriveled to the extent that practically no moisture is present.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.906 Well developed and strong.

Well developed and strong means that the main and lateral stems are firm, fibrous, and pliable; not distinctly immature or spindly or threadlike at time of packing.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§51.907 Diameter.

Diameter means the greatest dimension of the berry taken at right angles to a line running from the stem to the blossom end.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.908 Serious damage.

Serious damage means any defect or any combination of defects which seriously detracts from the appearance, or the edible or marketing quality of the grapes and includes berries which are split, crushed, wet, affected by decay or waterberry, or affected by heat or freezing. Grapes which show healed cracks at the blossom and shall not be considered as seriously damaged.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.909 Materially shriveled at capstem.

Materially shriveled at capstem means that the skin of the berry is definitely wrinkled adjacent to the capstem and the surface is materially sunken.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.910 Straggly.

Straggly means that the berries are so widely spaced on main and laterial stems that the bunch is distinctly open or very stemmy or stringy in structure.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.911 Container.

Container as used in these standards shall, for the purposes of determining maturity and other factors of grade of grapes in packages containing 5 pounds or less, mean the master container in which the individual packages are packed for shipment.

[52 FR 22437, June 12, 1987. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.912 Export.

When designated as Export, grapes shall be packed with any of the customary protective materials such as cushions, liners, or wraps, or properly packed in sawdust or granulated cork. The so-called ''semi-sawdust packs'' which are cushioned and/or covered with sawdust are not approved as protective packaging for export.

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991]

§ 51.913 Clusters.

Clusters as used in these standards in reference to the U.S. No. 1 Institutional grade only shall be defined as two or more berries sharing a common point of attachment.

[61 FR 11127, Mar. 19, 1996]

METRIC CONVERSION TABLE

§ 51.914 Metric conversion table.

Inches	Millimeters (mm)
3/16 equals	12.7
9/16 equals	14.3
10/16 equals	15.9
11/16 equals	17.5
12/16 equals	19.1
13/16 equals	20.6
14/16 equals	22.2
15/16 equals	28.8
1 equals	25.4
Pounds	**Grams**
¼ equals	113.4
½ equals	226.8
¾ equals	340.2
1 equals	453.6
2 equals	907.2
3 equals	1,360.8
4 equals	1,814.4
5 equals	2,268.0
10 equals	4,536.0

[36 FR 9126, May 20, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981. Redesignated at 56 FR 15802, Apr. 18, 1991, and further redesignated at 61 FR 11127, Mar. 19, 1996]

Subpart—United States Standards for Persian (Tahiti) Limes

SOURCE: 23 FR 4446, June 20, 1958, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1000 U.S. No. 1.

''U.S. No. 1'' consists of Persian limes which are firm, fairly well formed, of fairly smooth texture, which are free from decay, stylar end breakdown or

other internal discoloration, broken skins which are not healed, bruises (except those incident to proper handling and packing), hard or dry skins, and free from damage caused by freezing, dryness or mushy condition, sprayburn, exanthema (ammoniation), scars, thorn scratches, scale, sunburn, scab, blanching, yellow color, discoloration, buckskin, dirt or other foreign material, disease, insects or mechanical or other means.

(a) Each fruit in this grade shall have not less than an aggregate area of three-fourths of the surface of the fruit which shows good green color characteristic of the Persian lime: *Provided,* That lots of limes which fail to meet the U.S. No. 1 grade requirements only because of blanching shall be designated as ''U.S. No. 1, Mixed Color'': *And provided further,* That lots of limes which fail to meet the U.S. No. 1 or U.S. No. 1 Mixed Color grade requirements only because of turning yellow or yellow color, caused by the ripening process, shall be designated as ''U.S. No. 1, Turning''.

(b) The fruit shall have a juice content of not less than 42 percent, by volume.

(c) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the fruit in any lot may fail to meet the color requirements. In addition, not more than 10 percent, by count, of the fruit in any lot may be below the remaining requirements of this grade, but not more than one-half of this amount, or 5 percent, shall be allowed for decay, stylar end breakdown, broken skins which are not healed, or defects causing serious damage including not more than one-half of 1 percent for decay at shipping point: *Provided,* That an additional tolerance of 2½ percent, or a total of not more than 3 percent, shall be allowed for decay en route or at destination.

§ 51.1001 U.S. Combination.

''U.S. Combination'' consists of a combination of U.S. No. 1 and U.S. No. 2 limes: *Provided,* That at least 60 percent, by count, of the limes in the lot meet the requirements of U.S. No. 1 grade.

(a) In this grade the U.S. No. 1 limes shall meet the color requirements of the U.S. No. 1 grade and the U.S. No. 2 limes shall meet the color requirements of the U.S. No. 2 grade: *Provided,* That lots of limes which fail to meet the U.S. Combination grade requirements only because of blanching shall be designated as ''U.S. Combination, Mixed Color'': *And provided further,* That lots of limes which fail to meet the U.S. Combination or U.S. Combination Mixed Color grade requirements only because of turning yellow or yellow color, caused by the ripening process, shall be designated as ''U.S. Combination, Turning''.

(b) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the fruit in any lot may fail to meet the color requirements. In addition, not more than 10 percent, by count, of the fruit in any lot may be below the remaining requirements of the lower grade in the combination, but not more than one-half of this amount, or 5 percent, shall be allowed for limes affected by decay, stylar end breakdown and broken skins which are not healed, including not more than one-half of 1 percent for decay at shipping point: *Provided,* That an additional tolerance of 2½ percent, or a total of not more than 3 percent, shall be allowed for decay en route or at destination.

(c) No part of the above tolerances shall be allowed to reduce for the lot as a whole, the 60 percent of U.S. No. 1 limes required in the U.S. Combination grade, but individual containers may have not less than 50 percent of the higher grade.

§ 51.1002 U.S. No. 2.

''U.S. No. 2'' consists of Persian limes which are fairly firm, which are not badly deformed, and not of excessively rough texture, which are free from decay, stylar end breakdown or other internal discoloration, broken skins which are not healed, bruises (except those incident to proper handling and packing), and hard or dry skins, and free from serious damage caused by freezing, dryness or mushy condition, sprayburn, exanthema (ammoniation), scars, thorn scratches, scale, sunburn,

scab, blanching, yellow color, discoloration, buckskin, dirt or other foreign material, disease, insects or mechanical or other means.

(a) Each fruit in this grade shall have not less than an aggregate area of one-half of the surface of the fruit which shows good green color characteristic of the Persian lime: *Provided,* That lots of limes which fail to meet the U.S. No. 2 grade requirements only because of blanching shall be designated as ''U.S. No. 2, Mixed Color''; *And provided further,* That lots of limes which fail to meet the U.S. No. 2 or U.S. No. 2 Mixed Color grade requirements only because of turning yellow or yellow color, caused by the ripening process, shall be designated as ''U.S. No. 2, Turning''.

(b) The fruit shall have a juice content of not less than 42 percent, by volume.

(c) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the fruit in any lot may fail to meet the color requirements. In addition, not more than 10 percent, by count, of the fruit in any lot may be below the remaining requirements of this grade, but not more than one-half of this amount, or 5 percent, shall be allowed for decay, stylar end breakdown, and broken skins which are not healed, including not more than one-half of 1 percent for decay at shipping point: *Provided,* That an additional tolerance of 2½ percent, or a total of not more than 3 percent, shall be allowed for decay en route or at destination.

UNCLASSIFIED

§ 51.1003 Unclassified.

''Unclassified'' consists of Persian limes which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

APPLICATION OF TOLERANCES

§ 51.1004 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(1) For packages which contain more than 3 pounds and a tolerance of 10 percent or more is provided, individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 3 pounds and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one decayed fruit may be permitted in any package; and,

(2) For packages which contain 3 pounds or less, individual packages in any lot are not restricted as to the percentage of defects: *Provided,* That not more than 10 percent of the packages may have more than one decayed fruit.

STANDARD PACK

§ 51.1005 Standard pack.

(a) Fruit shall be fairly uniform in size, and when place packed in crates or cartons, the fruit shall be arranged according to the approved and recognized methods.

(b) All packages shall be well filled but the contents shall not show excessive or unnecessary bruising because of over-filled packages.

(c) ''Fairly uniform in size'' means that not more than 10 percent, by count of the fruit in any container may vary more than four-sixteenths of an inch in diameter.

(d) In order to allow for variations, other than sizing, incident to proper packing, not more than 5 percent of the packages in any lot may fail to meet the requirements of standard pack.

DEFINITIONS

§ 51.1006 Firm.

Firm means that the fruit is not soft or flabby.

§ 51.1007 Fairly well formed.

Fairly well formed means that the fruit shows normal characteristic shape for the Persian variety and is not materially flattened on one side.

§ 51.1008 Fairly smooth texture.

Fairly smooth texture means that the fruit is comparatively free from lumpiness and that pebbling is not abnormally coarse. Coarse pebbling is not objectionable as it is indicative of good keeping quality and is characteristic of the fruit, especially that from young trees.

§ 51.1009 Stylar end breakdown.

Stylar end breakdown is a physiological breakdown starting at the base of the nipple as a grayish tan water-soaked spot. A brownish discoloration develops in the rind. As it progresses the color of the affected area becomes darker and usually sinks below the healthy surface, but the area remains firm unless infected with secondary organisms that cause soft decay.

§ 51.1010 Damage.

Damage means any defect which materially affects the appearance, or the edible or shipping quality of the fruit. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Dryness or mushy condition which extends into all segments more than one-eighth of an inch at the stem end, or more than the equivalent of this amount, by volume, when occurring in other portions of the fruit;

(b) Sprayburn which changes the color to such an extent that the appearance of the fruit is materially affected, or which causes scarring that in the aggregate exceeds the area of a circle one-fourth inch in diameter;

(c) Exanthema (ammoniation) which materially detracts from the appearance of the fruit, or which occurs as small, thinly scattered spots over more than 10 percent of the fruit surface, or as solid scarring (not cracked) or depressions which in the aggregate exceed the area of a circle one-half inch in diameter;

(d) Scars which are dark, rough, or deep and in the aggregate exceed the area of a circle one-fourth inch in diameter, or scars which are fairly light in color, slightly rough, or of slight depth and in the aggregate exceed the area of a circle one-half inch in diameter, or scars which are light colored, fairly smooth, with no depth and aggregate more than 10 percent of the fruit surface;

(e) Thorn scratches when the injury is not well healed, or when dark colored, rough or deep and in the aggregate exceeds the area of a circle one-fourth inch in diameter, or when light colored, fairly smooth and concentrated and in the aggregate exceeds the area of a circle one-half inch in diameter, or light colored and scattered thorn injury which detracts from the appearance of the fruit to a greater extent than the aggregate area of one-half inch permitted for light colored concentrated injury;

(f) Scale when the appearance of the fruit is affected to a greater extent than that of a lime which has 10 medium to large California red or purple scale attached;

(g) Sunburn which causes appreciable flattening of the fruit, drying of the skin, material change in the color of the skin, appreciable drying of the flesh underneath the affected area, or which affects more than 5 percent of the fruit surface;

(h) Scab which materially affects the shape or texture;

(i) Blanching when more than 25 percent, in the aggregate, of the fruit surface shows a whitish to yellowish green area or areas because of shading, resting on the surface of the ground, or contact with other fruit on the tree. Such areas are not to be confused with limes which are turning yellow due to the ripening process;

(j) Yellow color when plainly visible and caused by the ripening process;

(k) Discoloration caused by rust mite, melanose or other means, when fairly smooth and more than 10 percent of the fruit surface is affected, or when slightly rough and in the aggregate exceeds the area of a circle one-half inch in diameter; and,

(l) Buckskin when more unsightly than the maximum discoloration allowed, or the fruit texture is materially affected.

§ 51.1011 Good green color.

Good green color means that the skin of the lime is of a good green color characteristic of the Persian variety.

§ 51.1012 Fairly firm.

Fairly firm means that the fruit is not soft or excessively flabby.

§ 51.1013 Badly deformed.

Badly deformed means that the fruit is seriously misshapen from any cause.

§ 51.1014 Excessively rough texture.

Excessively rough texture means that the skin is badly ridged or very decidedly lumpy.

§ 51.1015 Serious damage.

Serious damage means any defect which seriously affects the appearance, or the edible or shipping quality of the fruit. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(a) Dryness or mushy condition which extends into all segments more than one-fourth of an inch at the stem end, or more than the equivalent of this amount, by volume, when occurring in other portions of the fruit;

(b) Sprayburn which changes the color to such an extent that the appearance of the fruit is seriously injured or which causes scarring that in the aggregate exceeds the area of a circle one-half inch in diameter;

(c) Exanthema (ammoniation) which occurs as small spots over more than 25 percent of the fruit surface, or as solid scarring (not cracked) or depressions which aggregate more than 10 percent of the fruit surface;

(d) Scars which are dark, rough, or deep and aggregate more than 5 percent of the fruit surface, or scars which are fairly light in color, slightly rough, or of slight depth and aggregate more than 10 percent of the fruit surface, or scars which are light colored, fairly smooth, with no depth and aggregate more than 25 percent of the fruit surface;

(e) Thorn scratches when the injury is not well healed, or when dark colored, rough or deep and aggregates more than 5 percent of the fruit surface, or when light colored, fairly smooth and concentrated and aggregates more than 10 percent of the fruit surface, or light colored and scattered thorn injury which detracts from the appearance of the fruit to a greater extent than the 10 percent light colored concentrated injury;

(f) Scale when the appearance of the fruit is affected to a greater extent than that of a lime which has a blotch the area of a circle one-half inch in diameter;

(g) Sunburn which causes decided flattening of the fruit, marked drying or dark discoloration of the skin, material drying of the flesh underneath the affected area, or which affects more than 10 percent of the fruit surface;

(h) Scab which seriously affects shape or texture;

(i) Blanching when more than 50 percent, in the aggregate, of the fruit surface shows a whitish to yellowish green area or areas because of shading, resting on the surface of the ground, or contact with other fruit on the tree. Such areas are not to be confused with limes which are turning yellow due to the ripening process;

(j) Yellow color when plainly visible and caused by the ripening process;

(k) Discoloration caused by rust mite, melanose or other means, when fairly smooth and more than 50 percent of the fruit surface is affected, or when slightly rough and more than 25 percent of the fruit surface is affected; and,

(l) Buckskin when more unsightly than the maximum discoloration allowed, or the fruit texture is seriously affected.

§ 51.1016 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end of the fruit.

Subpart—United States Standards for Grades of Florida Oranges and Tangelos

SOURCE: 61 FR 20708, May 8, 1996, unless otherwise noted.

GENERAL

§ 51.1140 General.

The standards contained in this subpart apply only to the common or sweet orange group and varieties and hybrids of varieties belonging to the

Mandarin group, except tangerines, and to the citrus fruit commonly known as ''tangelo''—a hybrid between tangerine or mandarin orange (citrus reticulata) with either the grapefruit or pomelo (C. paradisi and C. grandis). Separate U.S. standards apply to tangerines. The standards for internal quality contained in §§51.1176 through 51.1179 apply only to common sweet oranges (citrus sinensis (L) Osbeck).

GRADES

§ 51.1141 U.S. Fancy.

''U.S. Fancy'' consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.1161.);

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Smooth texture;

(6) Well colored; and,

(7) Well formed.

(b) Free from:

(1) Ammoniation;

(2) Buckskin;

(3) Caked melanose;

(4) Creasing;

(5) Decay;

(6) Scab;

(7) Split navels;

(8) Sprayburn;

(9) Undeveloped segments;

(10) Unhealed skin breaks; and,

(11) Wormy fruit.

(c) Free from injury caused by:

(1) Bruises;

(2) Green spots;

(3) Oil spots;

(4) Rough, wide or protruding navels;

(5) Scale;

(6) Scars;

(7) Skin breakdown; and,

(8) Thorn scratches.

(d) Free from damage caused by:

(1) Dirt or other foreign material;

(2) Disease;

(3) Dryness or mushy condition;

(4) Hail;

(5) Insects;

(6) Riciness or woodiness;

(7) Sunburn; and,

(8) Other means.

(e) For tolerances see § 51.1151.

(f) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§51.1176–51.1179.)

§ 51.1142 U.S. No. 1 Bright.

The requirements for this grade are the same as for U.S. No. 1 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration.

(a) For tolerances see § 51.1151.

(b) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§51.1176–51.1179.)

§ 51.1143 U.S. No. 1.

''U.S. No. 1'' consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Color;

(i) Early and midseason varieties shall be fairly well colored.

(ii) For Valencia and other late varieties, not less than 50 percent, by count, shall be fairly well colored and the remainder reasonably well colored.

(2) Discoloration: Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.1161.);

(3) Fairly smooth texture;

(4) Firm;

(5) Mature;

(6) Similar varietal characteristics; and,

(7) Well formed.

(b) Free from:

(1) Decay;

(2) Unhealed skin breaks; and,

(3) Wormy fruit.

(c) Free from damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Dirt or other foreign material;

(7) Disease;

(8) Dryness or mushy condition;

(9) Green spots;

(10) Hail;

(11) Insects;

(12) Oil spots;
(13) Riciness or woodiness;
(14) Scab;
(15) Scale;
(16) Scars;
(17) Skin breakdown;
(18) Split, rough or protruding navels;
(19) Sprayburn;
(20) Sunburn;
(21) Thorn scratches; and,
(22) Other means.
(d) For tolerances see § 51.1151.
(e) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1144 U.S. No. 1 Golden.

The requirements for this grade are the same as for U.S. No. 1 except that not more than 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration.
(a) For tolerances see § 51.1151.
(b) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1145 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on each fruit shall be of rust mite type.
(a) For tolerances see § 51.1151.
(b) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1146 U.S. No. 1 Russet.

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration.
(a) For tolerances see § 51.1151.
(b) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1147 U.S. No. 2 Bright.

The requirements for this grade are the same as for U.S. No. 2 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration.
(a) For tolerances see § 51.1151.
(b) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1148 U.S. No. 2.

''U.S. No. 2'' consists of oranges which meet the following requirements:
(a) Basic requirements:
(1) Discoloration: Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See § 51.1161.)
(2) Fairly firm;
(3) Mature;
(4) Reasonably well colored;
(5) Similar varietal characteristics;
(6) Not more than slightly misshapen; and
(7) Not more than slightly rough texture.
(b) Free from:
(1) Decay;
(2) Unhealed skin breaks; and
(3) Wormy fruit.
(c) Free from serious damage caused by:
(1) Ammoniation;
(2) Bruises;
(3) Buckskin;
(4) Caked melanose;
(5) Creasing;
(6) Dirt or other foreign material;
(7) Disease;
(8) Dryness or mushy condition;
(9) Green spots;
(10) Hail;
(11) Insects;
(12) Oil spots;
(13) Riciness or woodiness;
(14) Scab;
(15) Scale;

(16) Scars;
(17) Skin breakdown;
(18) Split, rough or protruding navels;
(19) Sprayburn;
(20) Sunburn;
(21) Thorn scratches; and
(22) Other means.
(d) For tolerances see § 51.1151.
(e) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1149 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that at least 10 percent of the fruit shall have more than one-half of their surface, in the aggregate, affected by any type of discoloration.
(a) For tolerances see § 51.1151.
(b) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176–51.1179.)

§ 51.1150 U.S. No. 3.

''U.S. No. 3'' consists of oranges which meet the following requirements:
(a) Basic requirements:
(1) Mature;
(2) Misshapen;
(3) Poorly colored;
(4) Rough texture, not seriously lumpy;
(5) Similar varietal characteristics; and
(6) Slightly spongy.
(b) Free from:
(1) Decay;
(2) Unhealed skin breaks; and
(3) Wormy fruit.
(c) Free from very serious damage caused by:
(1) Ammoniation;
(2) Bruises;
(3) Buckskin;
(4) Caked melanose;
(5) Creasing;
(6) Disease;
(7) Dryness or mushy condition;
(8) Hail;
(9) Insects;
(10) Riciness or woodiness;
(11) Scab;
(12) Scale;
(13) Scars;
(14) Skin breakdown;
(15) Split navels;
(16) Sprayburn;
(17) Sunburn; and
(18) Other means.
(d) For tolerances see § 51.1151.
(e) Internal quality: Lots meeting the internal requirements for ''U.S. Grade AA Juice (Double A)'' or ''U.S. Grade A Juice'' may be so specified in connection with the grade. (See §§ 51.1176—51.1179.)

TOLERANCES

§ 51.1151 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, based on a minimum 25 count sample, are provided as specified:
(a) *Defects.* (1) U.S. Fancy, U.S. No. 1 Bright, U.S. No. 1, U.S. No. 1 Golden, U.S. No. 1 Bronze, U.S. No. 1 Russet, U.S. No. 2 Bright, U.S. No. 2, and U.S. No. 2 Russet grades.
(i) *For defects at shipping point.*[1] Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the specified grade: *Provided,* that included in this amount not more than 5 percent shall be allowed for defects causing very serious damage, including in this latter amount not more than 1 percent for decay or wormy fruit.
(ii) *For defects en route or at destination.* Not more than 12 percent of the fruit which fail to meet the requirements of the specified grade: *Provided,* that included in this amount not more than the following percentages shall be allowed for defects listed:
(A) 10 percent for fruit having permanent defects; or,
(B) 7 percent for defects causing very serious damage, including therein not more than 5 percent for very serious damage by permanent defects and not

[1] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

more than 3 percent for decay or wormy fruit.

(2) U.S. No. 3.

(i) *For defects at shipping point.*[1]. Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the grade: *Provided,* that included in this amount not more than 1 percent shall be for decay or wormy fruit.

(ii) *For defects en route or at destination.* Not more than 12 percent of the fruit which fail to meet the requirements of the grade: *Provided,* that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

(B) 3 percent for decay or wormy fruit.

(b) *Discoloration*—(1) *U.S. No. 1 Bright, U.S. No. 1, U.S. No. 2 Bright, and U.S. No. 2.* Not more than 10 percent of the fruit in any lot may fail to meet the requirements relating to discoloration as specified in each grade. No sample may have more than 20 percent of the fruit with excessive discoloration: *And provided further,* that the entire lot averages within the percentage specified.

(2) *U.S. No. 1 Golden.* Not more than 30 percent of the fruit shall have in excess of one-third of their surface, in the aggregate, and no part of any tolerance shall be allowed to increase this percentage. No sample may have more than 40 percent of the fruit with excessive discoloration: *And provided further,* that the entire lot averages within the percentage specified.

(3) *U.S. No. 1 Bronze, and U.S. No. 1 Russet.* At least 30 percent of the fruit shall have in excess of one-third of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage. No sample may have less than 20 percent of the fruit with required discoloration: *And provided further,* that the entire lot averages within the percentage specified.

(4) *U.S. No. 2 Russet.* At least 10 percent of the fruit shall have in excess of one-half of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage: *And provided further,* that the entire lot averages within the percentage specified.

[61 FR 20708, May 8, 1996, as amended at 61 FR 40290, Aug. 2, 1996]

APPLICATION OF TOLERANCES

§ 51.1152 Application of tolerances.

Individual samples are subject to the following limitations, unless otherwise specified in § 51.1151. Individual samples shall have not more than one and one-half times a specified tolerance of 10 percent or more, and not more than double a specified tolerance of less than 10 percent: *Provided,* that at least one decayed or wormy fruit may be permitted in any sample: And provided further, that the averages for the entire lot are within the tolerances specified for the grade.

[61 FR 40290, Aug. 2, 1996]

SIZE

§ 51.1153 Size.

(a) Fruits shall be fairly uniform in size and shall be packed in containers according to approved and recognized methods.

(b) ''Fairly uniform in size'' means that not more than 10 percent of the oranges per sample may vary more than one-half inch in diameter.

(c) In order to allow for variations incident to proper sizing, not more than 10 percent of the samples in any lot may fail to meet the requirements of size.

DEFINITIONS

§ 51.1154 Similar varietal characteristics.

Similar varietal characteristics means that the fruits in any container are similar in color and shape.

§ 51.1155 Well colored.

Well colored as applied to common oranges and tangelos means that the fruit has characteristic color for the variety with practically no trace of green color.

§ 51.1156 Firm.

Firm as applied to common oranges and tangelos means that the fruit is not soft, or noticeably wilted or flabby;

as applied to oranges of the Mandarin group (Satsumas, King, Mandarin), ''firm'' means that the fruit is not extremely puffy, although the skin may be slightly loose.

§51.1157 Well formed.

Well formed means that the fruit has the shape characteristic of the variety.

§51.1158 Mature.

Mature shall have the same meaning assigned the term in the Florida Citrus Code, Chapter 601, 1995 Edition, and the Official Rules Affecting the Florida Citrus Industry, in effect as of February 12, 1995. These orange maturity requirements are contained in the Florida Citrus Code, Chapter 601, Florida Statutes, Sections 601.19, and 601.20, 1995 Edition, and the State of Florida Department of Citrus Official Rules Affecting the Florida Citrus Industry, Part 1, Chapter 20–13 Market Classification, Maturity Standards and Processing or Packing Restrictions for Hybrids in effect as of February 12, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from, Florida Department of Citrus, Post Office Box 148, Lakeland, Florida 33802 or copies of both regulations may be inspected at USDA, AMS, F&VD, FPB, Standardization Section, Room 2065–S, 14th and Independence Ave., Washington, DC 20250 or at the Office of the Federal Register, Suite 700, 800 North Capitol Street, Washington, DC.

§51.1159 Smooth texture.

Smooth texture means that the skin is thin and smooth for the variety and size of the fruit.

§51.1160 Injury.

Injury means any specific defect described in §51.1175, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which slightly detracts from the appearance, or the edible or marketing quality of the fruit.

§51.1161 Discoloration.

Discoloration means russeting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by smooth or fairly smooth superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed for the grade.

§51.1162 Fairly smooth texture.

Fairly smooth texture means that the skin is fairly thin and not coarse for the variety and size of the fruit.

§51.1163 Damage.

Damage means any specific defect described in §51.1175, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§51.1164 Fairly well colored.

Fairly well colored as applied to common oranges and tangelos means that except for an aggregate area of green color which does not exceed the area of a circle 1 inch (25.4 mm) in diameter, the characteristic color predominates over the green color.

§51.1165 Reasonably well colored.

Reasonably well colored as applied to common oranges means that the characteristic color predominate over the green color on at least two-thirds of the fruit surface, in the aggregate.

§51.1166 Poorly colored.

Poorly colored as applied to common oranges means that not more than 25 percent of the surface may be solid dark green color.

§51.1167 Fairly firm.

Fairly firm as applied to common oranges and tangelos, means that the fruit may be slightly soft, but not bruised; as applied to oranges of the

Mandarin group (Satsumas, King, Mandarin), means that the skin of the fruit is not extremely puffy or extremely loose.

§ 51.1168 Slightly misshapen.

Slightly misshapen means that the fruit is not of the shape characteristic of the variety but is not appreciably elongated or pointed or otherwise deformed.

§ 51.1169 Slightly rough texture.

Slightly rough texture means that the skin is not of smooth texture but is not materially ridged, grooved, or wrinkled.

§ 51.1170 Serious damage.

Serious damage means any specific defect described in § 51.1175, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1171 Misshapen.

Misshapen means that the fruit is decidedly elongated, pointed or flatsided.

§ 51.1172 Slightly spongy.

Slightly spongy means that the fruit is puffy or slightly wilted but not flabby.

§ 51.1173 Very serious damage.

Very serious damage means any specific defect described in § 51.1175, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1174 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end.

§ 51.1175 Classification of defects.

TABLE I

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation		Not occurring as light speck type.	Scars are cracked or dark and aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Bruises	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Fruit is split open, peel is badly watersoaked, or rag is ruptured and juice sacs are ruptured causing a mushy condition affecting all segments more than ¾ inch (19.9 mm) at bruised area or the equivalent of this amount, by volume, when affecting more than one area on the fruit.
Buckskin		Aggregating more than a circle 1 inch (25.4 mm) in diameter.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose		Aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Creasing		Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.

TABLE I—Continued

Factor	Injury	Damage	Serious damage	Very serious damage
Dryness or mushy condition.	.....	Affecting all segments more than ¼ inch (6.4 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ½ inch (12.7 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ¾ inch (19.1 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots	Aggregating more than a circle ⅜ inch (9.5 mm) in diameter, caused by scale.	Aggregating more than a circle ⅝ inch (15.9 mm) in diameter, caused by scale.	Aggregating more than a circle ⅞ inch (22.2 mm) in diameter, caused by scale.	Aggregating more than ⅓ of the surface, caused by scale.
Oil spots	Aggregating more than a circle ⅜ inch (9.5 mm) in diameter.	Aggregating more than a circle ⅞ inch (22.2 mm) in diameter.	Aggregating more than a circle 1¼ inches (31.8 mm) in diameter.	Aggregating more than ⅓ of the surface.
Scab	.....	Materially detracts from the shape or texture, or aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Seriously detracts from the shape or texture, or aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scale	More than a few adjacent to the ''button'' at the stem end, or more than 6 scattered on other portions of the fruit.	Aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scars, Hail, or Thorn scratches [For smooth or fairly smooth superficial scars see § 51.1161.].	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep or rough aggregating more than a circle ¼ inch (6.4 mm) in diameter; slightly rough with slight depth aggregating more than a circle ⅞ inch (22.2 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than a circle 1¼ inches (31.8 mm) in diameter.	Deep or rough aggregating more than a circle ½ inch (12.7 mm) in diameter; slightly rough with depth aggregating more than a circle 1¼ inches (31.8 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than 10 percent of fruit surface.	Deep or rough or unsightly that appearance is very seriously affected.
Skin breakdown	Aggregating more than a circle ¼ inch (6.4 mm) in diameter.	Aggregating more than a circle ½ inch (12.7 mm) in diameter.	Aggregating more than a circle ⅞ inch (22.2 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sprayburn	.....	Aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Hard and aggregating more than a circle 1½ inches (38.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Split, rough, protruding navels.	Split is unhealed, or more than ⅛ inch (3.2 mm) in length, or navel protrudes beyond the general contour, and opening is so wide, folded and ridged that it detracts from the appearance.	Split is unhealed, or more than ¼ inch (6.4 mm) in length, or more than three well healed splits, or navel protrudes beyond the general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed, or more than ½ inch (12.7 mm) in length, or two or more splits aggregate more than 1 inch (25.4 mm) in length, or navel protrudes beyond general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed or fruit is seriously weakened.
Sunburn	.....	Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.

Note: All references to area or aggregating area, or length in this standard are based on an orange or tangelo 2⅞ inches (73.0 mm) in diameter, allowing proportionately greater areas on larger fruit and lesser areas on smaller fruit.

STANDARDS FOR INTERNAL QUALITY OF COMMON SWEET ORANGES (CITRUS SINENSIS (L) OSBECK)

§ 51.1176 U.S. Grade AA Juice (Double A).

Any lot of oranges, the juice content of which meets the following requirements, may be designated ''U.S. Grade AA Juice (Double A)'':

(a) Each lot of fruit shall contain an average of not less than 5 gallons (18.9 liters) of juice per standard packed box of 1⅗ bushels.

(b) The average juice content for any lot of fruit shall have not less than 10 percent total soluble solids, and not less than one-half of 1 percent anhydrous citric acid, or more than the permissible maximum acid specified in Table II of § 51.1178.

§ 51.1177 U.S. Grade A Juice.

Any lot of oranges, the juice content of which meets the following requirements, may be designated ''U.S. Grade A Juice'':

(a) Each lot of fruit shall contain an average of not less than 4½ gallons (17.0 liters) of juice per standard packed box of 1⅗ bushels.

(b) The average juice content for any lot of fruit shall have not less than 9 percent total soluble solids, and not less than one-half of 1 percent anhydrous citric acid, or more than the permissible maximum acid specified in Table II of § 51.1178.

§ 51.1178 Maximum anhydrous citric acid permissible for corresponding total soluble solids.

For determining the grade of juice, the maximum permissible anhydrous citric acid content in relation to corresponding total soluble solids in the fruit is set forth in the following Table II together with the minimum ratio of total soluble solids to anhydrous citric acid:

TABLE II

Total soluble solids (average pct)	Maximum anhydrous citric acid (average pct)	Minimum ratio of total soluble solids to anhydrous citric acid
9.0	0.947	9.50–1
9.1	.963	9.45–1
9.2	.979	9.40–1
9.3	.995	9.35–1
9.4	1.011	9.30–1
9.5	1.027	9.25–1
9.6	1.043	9.20–1
9.7	1.060	9.15–1
9.8	1.077	9.10–1
9.9	1.094	9.05–1
10.0	1.111	9.00–1
10.1	1.128	8.95–1
10.2	1.146	8.90–1
10.3	1.164	8.85–1
10.4	1.182	8.80–1
10.5	1.200	8.75–1
10.6	1.218	8.70–1
10.7	1.237	8.65–1
10.8	1.256	8.60–1
10.9	1.275	8.55–1
11.0	1.294	8.50–1
11.1	1.306	8.50–1
11.2	1.318	8.50–1
11.3	1.329	8.50–1
11.4	1.341	8.50–1
11.5	1.353	8.50–1
11.6	1.365	8.50–1
11.7	1.376	8.50–1
11.8	1.388	8.50–1
11.9	1.400	8.50–1
12.0	1.412	8.50–1
12.1	1.424	8.50–1
12.2	1.435	8.50–1
12.3	1.447	8.50–1
12.4	1.459	8.50–1
12.5	1.471	8.50–1
12.6	1.482	8.50–1
12.7	1.494	8.50–1
12.8	1.506	8.50–1
12.9	1.517	8.50–1
13.0	1.530	8.50–1
13.1	1.541	8.50–1
13.2	1.553	8.50–1
13.3	1.565	8.50–1
13.4	1.576	8.50–1
13.5	1.588	8.50–1
13.6	1.600	8.50–1
13.7	1.612	8.50–1
13.8	1.624	8.50–1
13.9	1.635	8.50–1
14.0	1.647	8.50–1
14.1	1.659	8.50–1
14.2	1.671	8.50–1
14.3	1.682	8.50–1
14.4	1.694	8.50–1
14.5	1.705	8.50–1
14.6	1.718	8.50–1
14.7	1.729	8.50–1
14.8	1.741	8.50–1
14.9	1.753	8.50–1
15.0	1.765	8.50–1
15.1	1.776	8.50–1
15.2	1.788	8.50–1
15.3	1.800	8.50–1
15.4	1.812	8.50–1
15.5	1.824	8.50–1
15.6 or more	.....	8.50–1

§ 51.1179 Method of juice extraction.

The juice used in the determining of solids, acids and juice content shall be extracted from representative samples as thoroughly as possible with a hand reamer or by such mechanical extractor or extractors as may be approved. The juice shall be strained through cheese cloth or other approved straining device of extra fine mesh to prevent passage of juice cells, pulp, or seeds.

Subpart—United States Standards for Peaches

SOURCE: 18 FR 7116, Nov. 11, 1953, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1210 U.S. Fancy.

U.S. Fancy consists of peaches of one variety which are mature but not soft or overripe, well formed and which are free from decay, bacterial spot, cuts which are not healed, growth cracks, hail injury, scab, scale, split pits, worms, worm holes, leaf or limb rub injury; and free from damage caused by bruises, dirt or other foreign material, other disease, insects or mechanical or other means.

(a) In addition to the above requirements, each peach shall have not less than one-third of its surface showing blushed, pink or red color.

(b) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the peaches in any lot may fail to meet the requirements of this grade other than for color, but not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, and not more than one-fifth of this amount, or 1 percent, shall be allowed for decay at shipping point: *Provided,* That an additional tolerance of 2 percent shall be allowed for soft, overripe, or decayed peaches en route or at destination. In addition, not more than 10 percent, by count, of the peaches in any lot may be below the specified color requirement.

§ 51.1211 U.S. Extra No. 1.

Any lot of peaches may be designated ''U.S. Extra No. 1'' when the peaches meet the requirements of U.S. No. 1 grade: *Provided,* That in addition to these requirements, 50 percent, by count, of the peaches in any lot shall have not less than one-fourth of the surface showing blushed, pink or red color.

(a) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the peaches in any lot may fail to meet the requirements of U.S. No. 1 grade, but not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, and not more than one-fifth of this amount, or 1 percent, shall be allowed for decay at shipping point: *Provided,* That an additional tolerance of 2 percent shall be allowed for soft, over-ripe or decayed peaches en route or at destination. No part of any tolerance shall be used to reduce for the lot as a whole the 50 percent of peaches required to have not less than one-fourth of the surface showing blushed, pink or red color, but individual packages may contain not less than 40 percent of peaches having this amount of color: *Provided,* That the entire lot averages not less than 50 percent.

§ 51.1212 U.S. No. 1.

U.S. No. 1 consists of peaches of one variety which are mature but not soft or overripe, well formed, and which are free from decay, growth cracks, cuts which are not healed, worms, worm holes, and free from damage caused by bruises, dirt, or other foreign material, bacterial spot, scab, scale, hail injury, leaf or limb rubs, split pits, other disease, insects or mechanical or other means.

(a) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the peaches in any lot may fail to meet the requirements of this grade, but not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, and not more than one-fifth of this amount, or 1 percent, shall be allowed for decay at shipping point: *Provided,* That an additional tolerance of 2 percent shall be

allowed for soft, overripe, or decayed peaches en route, or at destination.

§ 51.1213 U.S. No. 2.

U.S. No. 2 consists of peaches of one variety which are mature but not soft or overripe, not badly misshapen, and which are free from decay, cuts which are not healed, worms, worm holes, and free from serious damage caused by bruises, dirt or other foreign material, bacterial spot, scab, scale, growth cracks, hail injury, leaf or limb rubs, split pits, other disease, insects, or mechanical or other means.

(a) In order to allow for variations incident to proper grading and handling, not more than 10 percent, by count, of the peaches in any lot may fail to meet the requirements of this grade, but not more than one-tenth of this amount, or 1 percent, shall be allowed for decay at shipping point: *Provided,* That an additional tolerance of 2 percent shall be allowed for soft, overripe, or decayed peaches en route or at destination.

UNCLASSIFIED

§ 51.1214 Unclassified.

Unclassified consists of peaches which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

APPLICATION OF TOLERANCES

§ 51.1215 Application of tolerances to individual packages.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(1) For packages which contain more than 10 pounds, and a tolerance of 10 percent or more is provided (as in the case of oversize, where a tolerance of 15 percent is provided), individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 10 pounds and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one peach which is seriously damaged by insects or affected by decay may be permitted in any package.

(2) For packages which contain 10 pounds or less, individual packages in any lot are not restricted as to the percentage of defects: *Provided,* That not more than one peach which is seriously damaged by insects or affected by decay may be permitted in any package.

SIZE

§ 51.1216 Size requirements.

(a) The numerical count or the minimum diameter of the peaches packed in a closed container shall be indicated on the container.

(b) When the numerical count is not shown the minimum diameter shall be plainly stamped, stenciled, or otherwise marked on the container in terms of whole inches, whole and half inches, whole and quarter inches, or whole and eight inches, as 2 inches minimum, 2¼ inches minimum, 1⅞ inches minimum, in accordance with the facts. The minimum and maximum diameters may both be stated, as 1⅞ to 2 inches, or 2 to 2¼ inches, in accordance with the facts.

(c) *Diameter* means the greatest dimension measured at right angles to a line from stem to blossom end of the fruit.

(d) In order to allow for variations incident to proper sizing, not more than 10 percent, by count, of peaches in any lot may be below the specified minimum size and not more than 15 percent may be above any specified maximum size.

[18 FR 7116, Nov. 11, 1953. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 60 FR 39242, Aug. 2, 1995]

STANDARD PACK

§ 51.1217 Standard pack.

(a) Each package shall be packed so that the peaches in the shown face shall be reasonably representative in size, color and quality of the contents of the package.

(b) Peaches packed in U.S. Standard bushel baskets, or half-bushel baskets shall be ring faced and tightly packed with sufficient bulge to prevent any appreciable movement of the peaches within the packages when lidded.

(c) Peaches packed in standard western boxes shall be reasonably uniform in size and arranged in the packages according to the approved and recognized methods. Each wrapped peach shall be fairly well enclosed by its individual wrapper. All packages shall be well filled and tightly packed but the contents shall not show excessive or unnecessary bruising because of overfilled packages. The number of peaches in the box shall not vary more than 4 from the number indicated on the box.

(d) Peaches packed in other type boxes such as wire-bound boxes and fibre-board boxes may be place packed, or jumble packed faced, and all packs shall be well filled.

(e) Peaches packed in boxes equipped with cell compartments or molded trays shall be of the proper size for the cells or the molds in which they are packed.

(f) Peaches placed in individual paper cups and packed in boxes shall be in cups of the proper size for the peaches.

(g) In order to allow for variations incident to proper packing, not more than 10 percent of the packages in any lot may not meet these requirements.

DEFINITIONS

§ 51.1218 Mature.

Mature means that the peach has reached the stage of growth which will insure a proper completion of the ripening process.

§ 51.1219 Well formed.

Well formed means that the shape of the peach may be slightly irregular but not to the extent that its appearance is materially affected.

§ 51.1220 Leaf or limb rub injury.

Leaf or limb rub injury means that the scarring is not smooth, not light colored, or aggregates more than ¼ inch in diameter.

§ 51.1221 Damage.

Damage means any injury or defect which materially affects the appearance, or the edible or shipping quality of the peach. Any one of the following defects, or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Bacterial spot, when cracked, or when aggregating more than ⅜ inch in diameter;

(b) Scab spots, when cracked, or when aggregating more than ⅜ inch in diameter;

(c) Scale, when concentrated, or when scattered and aggregating more than ¼ inch in diameter;

(d) Hail injury which is unhealed, or deep, or when aggregating more than ¼ inch in diameter;

(e) Leaf or limb rubs, when not smooth, or when not light colored, or when aggregating more than ½ inch in diameter;

(f) Split pit, when causing any unhealed crack, or when causing any crack which is readily apparent, or when affecting shape to the extent that the fruit is not well formed.

§ 51.1222 Serious damage.

Serious damage means any injury or defect which seriously affects the appearance, or the edible or shipping quality of the peach. Any one of the following defects, or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(a) Bacterial spot, when any cracks are not well healed, or when aggregating more than ¾ inch in diameter;

(b) Scab spots, when cracked, or when healed and aggregating more than one inch in diameter;

(c) Scale, when aggregating more than ½ inch in diameter;

(d) Growth cracks, when unhealed, or more than ½ inch in length;

(e) Hail injury, when unhealed, or shallow hail injury when aggregating more than ¾ inch in diameter, or deep hail injury which seriously deforms the fruit or which aggregates more than ½ inch in diameter;

(f) Leaf or limb rubs, when smooth and light colored and aggregating more

than 1½ inches in diameter, or dark or slightly rough and barklike scars aggregating more than ¾ inch in diameter;

(g) Split pit, when causing any unhealed crack, or when healed and aggregating more than ½ inch in length including any part of the crack which may be covered by the stem;

(h) Soft or overripe peaches;

(i) Wormy fruit or worm holes.

§ 51.1223 Badly misshapen.

Badly misshapen means that the peach is so decidedly deformed that its appearance is seriously affected.

Subpart—United States Standards for Cleaned Virginia Type Peanuts in the Shell

SOURCE: 18 FR 7117, Nov. 11, 1953, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1235 U.S. Jumbo Hand Picked.

U.S. Jumbo Hand Picked shall consist of cleaned Virginia type peanuts in the shell which are mature, dry, and free from loose peanut kernels, dirt or other foreign material, pops, paper ends, and from damage caused by cracked or broken shells, discoloration or other means. The kernels shall be free from damage from any cause. In addition, the peanuts shall not pass through a screen having 37/64 × 3 inch perforations. Unless otherwise specified, the unshelled peanuts in any lot shall not average more than 176 count per pound.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 10.0 percent total for pops, peanuts having paper ends or damaged shells, loose undamaged peanut kernels, and dirt or other foreign material, but not more than one-twentieth of this amount, or 0.5 percent, shall be allowed for dirt or other foreign material.

(2) 5.0 percent for peanuts which will pass through the prescribed screen, but which are free from pops and from peanuts having paper ends or damaged shells.

(3) 3.5 percent for peanuts with damaged kernels, and damaged loose kernels.

§ 51.1236 U.S. Fancy Hand Picked.

U.S. Fancy Hand Picked shall consist of cleaned Virginia type peanuts in the shell which are mature, dry, and free from loose peanut kernels, dirt or other foreign material, pops, paper ends, and from damage caused by cracked or broken shells, discoloration or other means. The kernels shall be free from damage from any cause. In addition, the peanuts shall not pass through a screen having 32/64 × 3 inch perforations. Unless otherwise specified, the unshelled peanuts in any lot shall not average more than 225 count per pound.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 11.0 percent total for pops, peanuts having paper ends or damaged shells, loose undamaged peanut kernels, and dirt or other foreign material, but not more than one twenty-second of this amount, or 0.5 percent, shall be allowed for dirt or other foreign material.

(2) 5.0 percent for peanuts which will pass through the prescribed screen, but which are free from pops and from peanuts having paper ends or damaged shells.

(3) 4.5 percent for peanuts with damaged kernels, and damaged loose kernels.

UNCLASSIFIED

§ 51.1237 Unclassified.

Unclassified shall consist of cleaned Virginia type peanuts in the shell which fail to meet the requirements of either of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

DEFINITIONS

§51.1238 Mature.

Mature means that the shells are firm and well developed.

§51.1239 Pops.

Pops means fully developed shells which contain practically no kernels.

§51.1240 Paper ends.

Paper ends means peanuts which have very soft and/or very thin ends.

§51.1241 Damage.

Damage means any injury or defect which materially affects the appearance edible or shipping quality of the individual peanut or the lot as a whole. The following shall be considered as damage:

(a) Cracked or broken shells which have been broken to the extent that the kernel within is plainly visible without minute examination and with no application of pressure, or the appearance of the individual peanut is materially affected.

(b) Discolored shells which have dark discoloration caused by mildew, staining or other means affecting one-half or more of the shell surface. Talc powder or other similar material which may have been applied to the shells during the cleaning process shall not be removed to determine the amount of discoloration beneath, but the peanut shall be judged as it appears with the talc.

(c) Kernels which are rancid or decayed.

(d) Moldy kernels.

(e) Kernels showing sprouts extending more than one-eighth inch from the end of the kernel.

(f) Distinctly dirty kernels.

(g) Kernels which are wormy, or have worm frass adhering, or have worm cuts which are more than superficial.

(h) Kernels which have dark yellow color penetrating the flesh, or yellow pitting extending deep into the kernel.

§51.1242 Count per pound.

Count per pound means the number of peanuts in a pound. When determining the count per pound, one single kernel peanut shall be counted as one-half peanut.

Subpart—United States Standards for Summer and Fall Pears[1]

SOURCE: 20 FR 5620, Aug. 5, 1955, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§51.1260 General.

These standards apply to varieties such as Bartlett, Hardy and other similar varieties.

GRADES

§51.1261 U.S. No. 1.

''U.S. No. 1'' consists of pears of one variety which are mature, but not over-ripe, carefully hand-picked, clean, fairly well formed, free from decay, internal breakdown, scald, freezing injury, worm holes, black end, and from damage caused by hard end, bruises, broken skins, russeting, limb- rubs, hail, scars, drought spot, sunburn, sprayburn, stings or other insect injury, disease, or mechanical or other means. (See §§51.1265 and 51.1268.)

§51.1262 U.S. Combination.

A combination of U.S. No. 1 and U.S. No. 2 may be packed. When such a combination is packed, at least 50 percent of the pears in any container shall meet the requirements of U.S. No. 1. (See §§51.1265 and 51.1268.)

§51.1263 U.S. No. 2.

''U.S. No. 2'' consists of pears of one variety which are mature, but not over-ripe, carefully hand-picked, clean, not seriously misshapen, free from decay, internal breakdown, scald, freezing injury, worm holes, black end, and from damage caused by hard end, or broken skins. The pears shall also be free from serious damage caused by bruises, russeting, limbrubs, hail, scars, drought spot, sunburn, sprayburn, stings or other insect injury, disease, or mechanical or other means. (See §§51.1265 and 51.1268.)

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act.

UNCLASSIFIED

§ 51.1264 Unclassified.

''Unclassified'' consists of pears which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.1265 Tolerances.

(a) In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent of the pears in any lot may fail to meet the requirements of grade: *Provided,* That not more than 5 percent shall be seriously damaged by insects, and not more than 1 percent shall be allowed for decay or internal breakdown.

(b) When applying the foregoing tolerances to the combination grade no part of any tolerance shall be used to reduce the percentage of U.S. No. 1 pears required in the combination, but individual containers may have not more than 10 percent less than the percentage of U.S. No. 1 required: *Provided,* That the entire lot averages within the percentage specified.

APPLICATION OF TOLERANCES

§ 51.1266 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(1) For packages which contain more than 10 pounds, and a tolerance of 10 percent or more is provided individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 10 pounds and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one pear which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package.

(2) For packages which contain 10 pounds or less, individual packages in any lot are not restricted as to the percentage of defects or off-size: *Provided,* That not more than four times the tolerance specified may be permitted in any package for pears which are seriously damaged by insects or affected by decay or internal breakdown except that at least one defective pear may be permitted in any package.

BASIS FOR CALCULATING PERCENTAGES

§ 51.1267 Basis for calculating percentages.

(a) When the numerical count is marked on the container or when pears are packed in a container to weigh 5 pounds or less, percentages shall be calculated on the basis of count.

(b) When the minimum diameter or minimum and maximum diameters are marked on a container packed to weigh more than 5 pounds or when the pears are jumbled in a container packed to weigh more than 5 pounds, percentages shall be calculated on the basis of weight or an equivalent basis.

CONDITION AFTER STORAGE OR TRANSIT

§ 51.1268 Condition after storage or transit.

Decay, scald, or other deterioration which may have developed on pears after they have been in storage or transit shall be considered as affecting condition and not grade.

STANDARD PACK

§ 51.1269 Sizing.

(a) The numerical count, or the minimum size of the pears packed in closed containers shall be indicated on the package. The number of pears in the box shall not vary more than 3 from the number indicated on the box.

(b) When the numerical count is marked on western standard pear boxes the pears shall not vary more than three-eighths inch in their transverse diameter for counts 120 or less; one-fourth inch for counts 135 to 180, inclusive; and three-sixteenths inch for counts 193 or more.

(c) When the numerical count is marked on western standard half boxes or special half boxes packed three tiers

deep, the pears shall not vary more than three-eighths inch for counts 75 or less; one-fourths inch for counts 80 to 110, inclusive; and three-sixteenths inch for counts 115 or more.

(d) When the numerical count is marked on western standard half boxes or special half boxes packed two tiers deep, the pears shall not vary more than three-eighths inch for counts 50 or less; one-fourth inch for counts 55 to 70, inclusive; and three-sixteenths inch for counts 80 or more.

(e) When the numerical count is not shown, the minimum size shall be plainly stamped, stenciled or otherwise marked on the container in terms of whole inches, whole and half inches, whole and quarter inches, or whole and eighth inches, as 2½ inches minimum, 2¼ inches minimum, or 2⅝ inches minimum, in accordance with the facts. It is suggested that both minimum and maximum sizes be marked on the container, as 2¼ to 2¾ inches, 2½ to 2¾ inches, as such marking is especially desirable for pears marketed in the export trade.

(f) ''Size'' means the greatest transverse diameter of the pear taken at right angles to a line running from the stem to the blossom end.

§ 51.1270 Packing.

(a) Each package shall be packed so that the pears in the shown face shall be reasonably representative in size and quality of the contents of the package.

(b) Pears packed in any container shall be tightly packed. All packages shall be well filled but the contents shall not show excessive or unnecessary bruising because of overfilled packages.

(c) Pears packed in boxes shall be arranged in containers according to the approved and recognized methods with the pears packed lengthwise. A bridge shall not be allowed in any standard pack. When wrapped, each pear shall be fairly well enclosed by its individual wrapper.

(d) Pears packed in round stave bushel baskets, tubs or in barrels shall be ring faced.

§ 51.1271 Tolerances for standard pack.

(a) In order to allow for variations incident to proper sizing, not more than 5 percent of the pears in any lot may fail to meet the size requirements: *Provided*, That when the maximum and minimum sizes are both stated, an additional 10 percent tolerance shall be allowed for pears which are larger than the maximum size stated.

(b) In order to allow for variations incident to proper packing, not more than 10 percent of the containers in any lot may fail to meet these requirements, but no part of this tolerance shall be allowed for bridge packs, or for packs with different sizes and arrangements such as layers of 195 size and arrangement, and layers of 180 size and arrangement packed in the same box.

DEFINITIONS

§ 51.1272 Mature.

(a) *Mature* means that the pear has reached the stage of maturity which will insure the proper completion of the ripening process.

(b) Before a mature pear becomes overripe it will show varying degrees of firmness, depending upon the stage of the ripening process. Therefore, a statement of firmness should be given in order to indicate the stage of the ripening process. A description of the ground color should also be given.

(1) The following terms should be used for describing the ground color: *Green*, *Light Green*, *Yellowish Green*, and *Yellow*.

(2) The following terms should be used for describing the firmness of pears:

(i) *Hard* means that the flesh of the pear is solid and does not yield appreciably even to considerable pressure.

(ii) *Firm* means that the flesh of the pear is fairly solid but yields somewhat to moderate pressure.

(iii) *Firm ripe* means that the flesh of the pear yields readily to moderate pressure.

(iv) *Ripe* means that the pear is at the stage where it is in its most desirable condition for eating.

§ 51.1273 Overripe.

Overripe means dead ripe, very mealy or soft, past commercial utility.

§ 51.1274 Carefully hand-picked.

Carefully hand-picked means that the pears do not show evidence of rough handling or of having been on the ground.

§ 51.1275 Clean.

Clean means free from excessive dirt, dust, spray residue or other foreign material.

§ 51.1276 Black end.

Black end is evidenced by an abnormally deep green color around the calyx, or black spots usually occurring on the one-third of the surface nearest to the calyx, or by an abnormally shallow calyx cavity.

§ 51.1277 Fairly well formed.

Fairly well formed means that the pear may be slightly abnormal in shape but not to an extent which detracts materially from the appearance of the fruit.

§ 51.1278 Damage.

Damage means any injury or defect which materially affects the appearance, or the edible or shipping quality.

(a) Hard end shall be considered as damage if the pear shows a distinctly constricted protrusion at the blossom end, or an abnormally yellow color at the blossom end, or an abnormally smooth rounded base with little or no depression at the calyx, or if the flesh near the calyx is abnormally dry and tough or woody.

(b) Slight handling bruises and package bruises such as are incident to good commercial handling in the preparation of a tight pack shall not be considered damage.

(c) Any pear with one skin break larger than three-sixteenths inch in diameter or depth, or with more than one skin break one-eighth inch or larger in diameter or depth shall be considered damaged, and scored against the grade tolerance.[2]

(1) Small inconspicuous skin breaks, less than one-eighth inch in diameter or depth, shall not be considered damage. In addition, not more than 15 percent of the pears in any container may have not more than one skin break from one-eighth inch to three-sixteenths inch, inclusive, in diameter or depth.[2]

(d) Russeting which exceeds the following shall be considered as damage:

(1) On all varieties excessively rough russeting (russeting which shows ''frogging'' or slight cracking) when the aggregate area exceeds one-half inch in diameter.[2]

(2) On Bartlett and other smooth-skinned varieties, slightly rough russeting, or thick russeting such as is characteristic of frost injury, when the aggregate area exceeds three-fourths inch in diameter.[2]

(3) On Bartlett and other smooth-skinned varieties, smooth solid or smooth netlike russeting when the aggregate area exceeds 15 percent of the surface.

(4) On Hardy, Sand and other similar varieties, rough or thick russeting such as is characteristic of frost injury, when the aggregate area exceeds three-fourths inch in diameter. On any of these varieties any amount of characteristic russeting is permitted whether due to natural causes such as weather or stimulated by artificial means; leaf whips or light limbrubs which resemble and blend into russeted areas shall be considered as russet.[2]

(e) Any one of the following defects or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(1) Any limbrubs which are cracked, softened, or more than slightly depressed.

(2) Black discoloration caused by limbrubs, which exceeds an aggregate area of three-eighths inch in diameter.[2]

(3) Dark brown discoloration or excessive roughness caused by limbrubs which exceeds an aggregate area of one-half inch in diameter.[2]

(4) Slightly rough, light colored discoloration caused by limbrubs which exceeds an aggregate area of three-fourths inch in diameter.[2]

[2] The area refers to that of a circle of the specified diameter.

(5) Smooth, light colored discoloration caused by limbrubs which exceeds an aggregate area of 1 inch in diameter.[2]

(6) Hail marks or other similar depressions or scars which are not shallow or superficial, or where the injury affects an aggregate area of more than three-eighths inch in diameter.[2]

(7) Drought spot when more than one in number, or when the external injury exceeds an aggregate area of three-eighths inch in diameter, or when the appearance of the flesh is materially affected by corky tissue or brownish discoloration.[2]

(8) Sunburn or sprayburn where the skin is blistered, cracked, or shows any light tan or brownish color, or the shape of the pear is appreciably flattened, or the flesh is appreciably softened or changed in color, except that sprayburn of a russet character shall be considered under the definition of russeting.

(9) Insects: (i) More than two healed codling moth stings, or any insect sting which is over three thirty-seconds of an inch in diameter, or other insect stings affecting the appearance to an equal extent.[2]

(ii) Blister mite or canker worm injury which is not shallow or superficial, or where the injury affects an aggregate area of more than three-eighths inch in diameter.[2]

(10) Disease: (i) Scab spots which are black and which cover an aggregate area of more than one-fourth inch in diameter except that scab spots of a russet character shall be considered under the definition of russeting.

(ii) Sooty blotch which is thinly scattered over more than 5 percent of the surface, or dark, heavily concentrated spots which affect an area of more than three-eighths inch in diameter.[2]

§ 51.1279 Seriously misshapen.

Seriously misshapen means that the pear is excessively flattened or elongated for the variety, or is constricted or deformed so it will not cut three fairly uniform good quarters, or is so badly misshapen that the appearance is seriously affected.

[2] The area refers to that of a circle of the specified diameter.

§ 51.1280 Serious damage.

Serious damage means any injury or defect which seriously affects the appearance, or the edible or shipping quality.

(a) Russeting which in the aggregate exceeds the following shall be considered as serious damage:

(1) On all varieties, excessively rough russeting (russeting which shows ''frogging'' or slight cracking) when the aggregate area exceeds three-fourths inch in diameter.[2]

(2) On all varieties, thick russeting such as is characteristic of frost injury, 15 percent of the surface.

(b) Any one of the following defects or combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(1) Limbrubs which are more than slightly cracked, or excessively rough limbrubs or dark brown or black discoloration caused by limbrubs which exceeds an aggregate area of three-fourths inch in diameter. Other limbrubs which affect an aggregate area of more than one-tenth of the surface.[2]

(2) Hail marks or other similar depressions or scars which affect an aggregate area of more than three-fourths inch in diameter, or which materially deform or disfigure the fruit.[2]

(3) Drought spot when more than two in number, or where the external injury affects an aggregate area of more than three-fourths inch in diameter, or when the appearance of the flesh is seriously affected by corky tissue or brownish discoloration.[2]

(4) Sunburn or sprayburn where the skin is blistered, cracked or shows any brownish color, or where the shape of the pear is materially flattened, or the flesh is softened or materially changed in color, except that sprayburn of a russet character shall be considered under the definition of russeting.

(5) Insects: (i) Worm holes. More than three healed codling moth stings, of which not more than two may be over three thirty-seconds of an inch in diameter, or other insect stings affecting the appearance to an equal extent.[2]

[2] The area refers to that of a circle of the specified diameter.

(ii) Blister mite or canker worm injury which affects an aggregate area of more than three-fourths inch in diameter or which materially deforms or disfigures the fruit.[2]

(6) Disease: (i) Scab spots which are black and which cover an aggregate area of more than one-half inch in diameter, except that scab spots of a russet character shall be considered under the definition of russeting.[2]

(ii) Sooty blotch which is thinly scattered over more than 15 percent of the surface, or dark, heavily concentrated spots which affect an area of more than three-fourths inch in diameter.[2]

Subpart—United States Standards for Winter Pears[1]

SOURCE: 20 FR 5752, Aug. 10, 1955, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.1300 General.

These standards apply to varieties such as Anjou, Bosc, Winter Nelis, Comice, Flemish Beauty and other similar varieties.

GRADES

§ 51.1301 U.S. Extra No. 1.

''U.S. Extra No. 1'' consists of pears of one variety which are mature, but not overripe, carefully hand-picked, clean, well formed, free from decay, internal breakdown, scald, freezing injury, worm holes, black end, hard end, drought spot, and free from injury caused by russeting, limbrubs, hail, scars, cork spot, sunburn, sprayburn, stings or other insect injury, or mechanical or other means, except that they shall be free from damage caused by bruises, broken skins, or disease. (See §§ 51.1306 and 51.1309.)

§ 51.1302 U.S. No. 1.

''U.S. No. 1'' consists of pears of one variety which are mature, but not over-ripe, carefully hand-picked, clean, fairly well formed, free from decay, internal breakdown, scald, freezing injury, worm holes, black end, and from damage caused by hard end, bruises, broken skins, russeting, limbrubs, hail, scars, cork spot, drought spot, sunburn, sprayburn, stings or other insect injury, disease, or mechanical or other means. (See §§ 51.1306 and 51.1309.)

§ 51.1303 U.S. Combination.

A combination of U.S. No. 1 and U.S. No. 2 may be packed. When such a combination is packed, at least 50 percent of the pears in any container shall meet the requirements of U.S. No. 1. (See §§ 51.1306 and 51.1309.)

§ 51.1304 U.S. No. 2.

''U.S. No. 2'' consists of pears of one variety which are mature, but not overripe, carefully hand-picked, clean, not seriously misshapen, free from decay, internal breakdown, scald, freezing injury, worm holes, black end, and from damage caused by hard end, or broken skins. The pears shall also be free from serious damage caused by bruises, russeting, limbrubs, hail, scars, cork spot, drought spot, sunburn, sprayburn, stings or other insect injury, disease, or mechanical or other means. (See §§ 51.1306 and 51.1309.)

UNCLASSIFIED

§ 51.1305 Unclassified.

''Unclassified'' consists of pears which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.1306 Tolerances.

(a) In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent of the pears in any lot may fail to meet the requirements of grade: *Provided*, That not more than 5 percent shall be seriously damaged by insects, and not more than 1 percent shall be allowed for decay or internal breakdown.

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act.

(b) When applying the foregoing tolerances to the combination grade no part of any tolerance shall be used to reduce the percentage of U. S. No. 1 pears required in the combination, but individual containers may have not more than 10 percent less than the percentage of U.S. No. 1 required: *Provided,* That the entire lot averages within the percentage specified.

APPLICATION OF TOLERANCES

§ 51.1307 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(1) For packages which contain more than 10 pounds, and a tolerance of 10 percent or more is provided, individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 10 pounds and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one pear which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package.

(2) For packages which contain 10 pounds or less, individual packages in any lot are not restricted as to the percentage of defects or off-size: *Provided,* That not more than four times the tolerance specified may be permitted in any package for pears which are seriously damaged by insects or affected by decay or internal breakdown except that at least one defective pear may be permitted in any package.

BASIS FOR CALCULATING PERCENTAGES

§ 51.1308 Basis for calculating percentages.

(a) When the numerical count is marked in the container or when pears are packed in a container to weigh 5 pounds or less, percentages shall be calculated on the basis of count.

(b) When the minimum diameter or minimum and maximum diameters are marked on a container packed to weigh more than 5 pounds or when the pears are jumbled in a container packed to weigh more than 5 pounds, percentages shall be calculated on the basis of weight or an equivalent basis.

CONDITION AFTER STORAGE OR TRANSIT

§ 51.1309 Condition after storage or transit.

Decay, scald or other deterioration which may have developed on pears after they have been in storage or transit shall be considered as affecting condition and not the grade.

STANDARD PACK

§ 51.1310 Sizing.

(a) The numerical count, or the minimum size of the pears packed in closed containers shall be indicated on the package. The number of pears in the box shall not vary more than 3 from the number indicated on the box.

(b) When the numerical count is marked on western standard pear boxes the pears shall not vary more than three-eighths inch in their transverse diameter for counts 120 or less; one-fourth inch for counts 135 to 180, inclusive; and three-sixteenths inch for counts 193 or more.

(c) When the numerical count is marked on western standard half boxes or special half boxes packed three tiers deep, the pears shall not vary more than three-eighths inch for coutns 75 or less; one-fourth inch for counts 80 to 110, inclusive; and three-sixteenths inch for counts 115 or more.

(d) When the numerical count is marked on western standard half boxes or special half boxes packed two tiers deep, the pears shall not vary more than three-eighths inch for counts 50 or less; one-fourth inch for counts 55 to 70, inclusive; and three-sixteenths inch for counts 80 or more.

(e) When the numerical count is not shown, the minimum size shall be plainly stamped, stenciled or otherwise marked on the container in terms of whole inches, whole and half inches, whole and quarter inches, or whole and eighth inches, as 2½ inches minimum, 2¼ inches minimum, or 2⅝ inches minimum, in accordance with the facts. It is suggested that both minimum and maximum sizes be marked on the container, as 2¼ to 2¾ inches, 2½ to 2¾

inches, as such marking is especially desirable for pears marketed in the export trade.

(f) ''Size'' means the greatest transverse diameter of the pear taken at right angles to a line running from the stem to the blossom end.

§ 51.1311 Packing.

(a) Each package shall be packed so that the pears in the shown face shall be reasonably representative in size and quality of the contents of the package.

(b) Pears packed in any container shall be tightly packed. All packages shall be well filled but the contents shall not show excessive or unnecessary bruising because of overfilled packages.

(c) Pears packed in boxes shall be arranged in containers according to the approved and recognized methods with the pears packed lengthwise. A bridge shall not be allowed in any standard pack. When wrapped, each pear shall be fairly well enclosed by its individual wrapper.

(d) Pears packed in round stave bushel baskets, tubs, or in barrels shall be ring faced.

§ 51.1312 Tolerances for standard pack.

(a) In order to allow for variations incident to proper sizing, not more than 5 percent of the pears in any lot may fail to meet the size requirements: *Provided,* That when the maximum and minimum sizes are both stated, an additional 10 percent tolerance shall be allowed for pears which are larger than the maximum size stated.

(b) In order to allow for variations incident to proper packing, not more than 10 percent of the containers in any lot may fail to meet these requirements but no part of this tolerance shall be allowed for bridge packs, or for packs with different sizes and arrangements such as layers of 195 size and arrangement, and layers of 180 size and arrangement packed in the same box.

DEFINITIONS

§ 51.1313 Mature.

(a) *Mature* means that the pear has reached the stage of maturity which will insure the proper completion of the ripening process.

(b) Before a mature pear becomes overripe it will show varying degrees of firmness depending upon the stage of the ripening process. Therefore, a statement of firmness should be given in order to indicate the stage of the ripening process. A description of the ground color should also be given.

(1) The following terms should be used for describing the ground color: *Green, Light Green, Yellowish Green,* and *Yellow*.

(2) The following terms should be used for describing the firmness of pears:

(i) *Hard* means that the flesh of the pear is solid and does not yield appreciably even to considerable pressure.

(ii) *Firm* means that the flesh of the pear is fairly solid but yields somewhat to moderate pressure.

(iii) *Firm ripe* means that the flesh of the pear yields readily to moderate pressure.

(iv) *Ripe* means that the pear is at the stage where it is in its most desirable condition for eating.

§ 51.1314 Overripe.

Overripe means dead ripe, very mealy or soft, past commercial utility.

§ 51.1315 Carefully hand-picked.

Carefully hand-picked means that the pears do not show evidence of rough handling or of having been on the ground.

§ 51.1316 Clean.

Clean means free from excessive dirt, dust, spray residue or other foreign material.

§ 51.1317 Well formed.

Well formed means having the shape characteristic of the variety. Slight irregularities of shape from type which do not appreciably detract from the general appearance of the fruit shall be considered well formed.

§ 51.1318 Black end.

Black end is evidenced by an abnormally deep green color around the calyx, or black spots usually occurring on the one-third of the surface nearest

to the calyx, or by an abnormally shallow calyx cavity.

§ 51.1319 Injury.

Injury means any blemish or defect, that more than slightly affects the appearance, or the edible or shipping quality. The following shall be considered as injury:

(a) Russeting which exceeds the following shall be considered as injury:

(1) On all varieties any excessively rough russeting (russeting which shows ''frogging'' or slight cracking).

(2) On Comice, and on Anjou and other smooth-skinned varieties, slightly rough russeting, or thick russeting, such as is characteristic of frost injury, when the aggregate area exceeds one-half inch in diameter.[2]

(3) On Anjou and other smooth-skinned varieties, smooth solid russeting when the aggregate area exceeds one-half inch in diameter and smooth net-like russeting when the aggregate area exceeds 15 percent of the surface, and on Comice, smooth solid or smooth netlike russeting when the aggregate area exceeds one-third of the surface, except that, in addition, on these and similar varieties, any amount of characteristic smooth russeting shall be permitted on that portion of the calyx end not visible for more than one-half inch along the contour of the pear, when it is placed calyx end down on a flat surface.[2]

(4) On any of the following and other similar varieties, rough or thick russeting such as is characteristic of frost injury when the aggregate area exceeds one-half inch in diameter.[2] On any of these varieties any amount of characteristic russeting is permitted whether due to natural causes such as weather or stimulated by artificial means; leaf whips or light limbrubs which resemble and blend into russeted areas shall be considered as russet:

Bosc, Clairgeau, Easter Beurre, Flemish Beauty, Kieffer, P. Barry, Pound, Seckel, Sheldon, Winter Nelis, and other similar varieties.

(b) Any one of the following defects or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as injury:

(1) Limbrubs which are cracked, softened, more than very slightly depressed, not light in color, or exceeding an aggregate area of three-fourths inch in diameter.[2]

(2) Hail marks or other similar depressions or scars which are not very shallow or superficial, or which affect an aggregate area of more than one-fourth inch in diameter.[2]

(3) Cork spot when a pear shows depressions or the flesh of the pear is more than slightly affected.

(4) Sunburn or sprayburn if the normal color of the fruit has been materially changed, or if the skin is blistered or cracked, or the flesh softened or discolored.

(5) More than two healed slight stings or depressions, or any stings which materially affect the general appearance of the fruit.

(6) Blister mite or canker worm injury which is not very shallow and superficial or where the injury affects an aggregate area of more than one-fourth inch.[2]

§ 51.1320 Fairly well formed.

Fairly well formed means that the pear may be slightly abnormal in shape but not to an extent which detracts materially from the appearance of the fruit. Winter Nelis pears with characteristic slight sutures or with slight flattening on one side and/or other slight irregularities which do not materially detract from the general appearance of the pear shall be considered fairly well formed.

§ 51.1321 Damage.

Damage means any injury or defect which materially affects the appearance, or the edible or shipping quality.

(a) Hard end shall be considered as damage if the pear shows an abnormally yellow color at the blossom end, or an abnormally smooth rounded base with little or no depression at the calyx, or if the flesh near the calyx is abnormally dry and tough or woody.

(b) Slight handling bruises and package bruises such as are incident to good commercial handling in the preparation of a tight pack shall not be considered damage.

[2] The area refers to that of a circle of the specified diameter.

(c) Any pear with one skin break larger than three-sixteenths inch in diameter of depth, or with more than one skin break one-eighth inch or larger in diameter or depth, shall be considered damaged, and scored against the grade tolerance.[2]

(1) Small inconspicuous skin breaks, less than one-eighth inch in diameter or depth, shall not be considered damage. In addition, not more than 15 percent of the pears in any container may have not more than one skin break from one-eighth inch to three-sixteenths inch, inclusive, in diameter or depth.[2]

(d) Russeting which exceeds the following shall be considered as damage:

(1) On all varieties excessively rough russeting (russeting which shows ''frogging'' or slight cracking) when the aggregate area exceeds one-half inch in diameter.[2]

(2) On Anjou and other smooth-skinned varieties, slightly rough russeting, or thick russeting such as is characteristic of frost injury, when the aggregate area exceeds three-fourths inch in diameter.[2]

(3) On Anjou, smooth solid or smooth netlike russeting when the aggregate area exceeds one-third of the surface, and on other smooth-skinned varieties, 15 percent of the surface, except that, in addition, on Anjou and other smooth-skinned varieties, any amount of characteristic smooth russeting shall be permitted on that portion of the calyx end not visible for more than one-half inch along the contour of the pear, when it is placed calyx end down on a flat surface.

(4) On any of the following and other similar varieties, rough or thick russeting such as is characteristic of frost injury, when the aggregate area exceeds three-fourths inch in diameter. On any of these varieties any amount of characteristic russeting is permitted whether due to natural causes such as weather or stimulated by artificial means; leaf whips or light limbrubs which resemble and blend into russeted areas shall be considered as russet:

Bosc, Clairgeau, Comice, Easter Beurre, Flemish Beauty, Kieffer, P. Barry, Pound, Seckel, Sheldon, Winter Nelis, and other similar varieties.

(e) Any one of the following defects or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(1) Any limbrubs which are cracked, softened, or more than slightly depressed.

(2) Black discoloration caused by limbrubs which exceeds an aggregate area of three-eighths inch in diameter.

(3) Dark brown discoloration or excessive roughness caused by limbrubs which exceeds an aggregate area of one-half inch in diameter.

(4) Slightly rough, light colored discoloration caused by limbrubs which exceeds an aggregate area of three-fourths inch in diameter.

(5) Smooth, light colored discoloration caused by limbrubs which exceeds an aggregate area of 1 inch in diameter.[2]

(6) Hail marks or other similar depressions or scars which are not shallow or superficial, or where the injury affects an aggregate area of more than three-eighths inch in diameter.[2]

(7) Cork spot when more than one in number is visible externally or when the flesh is materially affected.

(8) Drought spot when more than one in number, or when the external injury exceeds an aggregate area of three-eighths inch in diameter, or when the appearance of the flesh is materially affected by corky tissue or brownish discoloration.[2]

(9) Sunburn or sprayburn where the skin is blistered, cracked, or shows any light tan or brownish color, or the shape of the pear is appreciably flattened, or the flesh is appreciably softened or changed in color, except that sprayburn of a russet character shall be considered under the definition of russeting.

(10) Insects: (i) More than two healed codling moth stings, or any insect sting which is over three thirty-seconds of an inch in diameter, or other insect stings affecting the appearance to an equal extent.[2]

(ii) Blister mite or canker worm injury which is not shallow or superficial, or where the injury affects an

[2] The area refers to that of a circle of the specified diameter.

aggregate area of more than three-eighths inch in diameter.[2]

(11) Disease: (i) Scab spots which are black and which cover an aggregate area of more than one-fourth inch in diameter, except that scab spots of a russet character shall be considered under the definition of russeting.[2]

(ii) Sooty blotch which is thinly scattered over more than 5 percent of the surface, or dark, heavily concentrated spots which affect an area of more than three-eighths inch in diameter.[2]

§ 51.1322 Seriously misshapen.

Seriously misshapen means that the pear is excessively flattened or elongated for the variety, or is constricted or deformed so it will not cut three fairly uniform good quarters, or is so badly misshapen that the appearance is seriously affected.

§ 51.1323 Serious damage.

Serious damage means any injury or defect which seriously affects the appearance, or the edible or shipping quality.

(a) Russeting which in the aggregate exceeds the following shall be considered as serious damage:

(1) On all varieties, excessively rough russeting (russeting which shows ''frogging'' or slight cracking) when the aggregate area exceeds three-fourths inch in diameter.[2]

(2) On all varieties, thick russeting such as is characteristic of frost injury, 15 percent of the surface.

(3) On Anjou, smooth solid or smooth netlike russeting when the aggregate area exceeds two-thirds of the surface, except that, in addition, any amount of characteristic smooth russeting shall be permitted on that portion of the calyx end not visible for more than one-half inch along the contour of the pear, when it is placed calyx end down on a flat surface. On Flemish Beauty smooth russeting shall be permitted on the entire surface.

(b) Any one of the following defects or combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(1) Limbrubs which are more than slightly cracked, or excessively rough limbrubs or dark brown or black discoloration caused by limbrubs which exceeds an aggregate area of three-fourths inch in diameter.[2]

(2) Other limbrubs which affect an aggregate area of more than one-tenth of the surface.

(3) Hail marks or other similar depressions or scars which affect an aggregate area of more than three-fourths inch in diameter, or which materially deform or disfigure the fruit.[2]

(4) Cork spot when more than two in number are visible externally or when the flesh is seriously affected.

(5) Drought spot when more than two in number, or where the external injury affects an aggregate area of more than three-fourths inch in diameter, or when the appearance of the flesh is seriously affected by corky tissue or brownish discoloration.[2]

(6) Sunburn or sprayburn where the skin is blistered, cracked or shows any brownish color, or where the shape of the pear is materially flattened, or the flesh is softened or materially changed in color, except that sprayburn of a russet character shall be considered under the definition of russeting.

(7) Insects: (i) Worm holes. More than three healed codling moth stings, of which not more than two may be over three thirty-seconds of an inch in diameter, or other insect stings affecting the appearance to an equal extent.[2]

(ii) Blister mite or canker worm injury which affects an aggregate area of more than three-fourths inch in diameter or which materially deforms or disfigures the fruit.[2]

(8) Disease: (i) Scab spots which are black, and which cover an aggregate area of more than one-half inch in diameter, except that scab spots of a russet character shall be considered under the definition of russeting.[2]

(ii) Sooty blotch which is thinly scattered over more than 15 percent of the surface, or dark heavily concentrated spots which affect an area of more than three-fourths inch in diameter.[2]

[2] The area refers to that of a circle of the specified diameter.

[2] The area refers to that of a circle of the specified diameter.

Subpart—United States Standards for Pears for Canning

SOURCE: 35 FR 6957, May 1, 1970, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.1345 General.

All percentages shall be calculated on the basis of weight.

GRADES

§ 51.1346 U.S. No. 1.

''U.S. No. 1'' consists of pears of one variety which are mature, handpicked, firm, well formed, free from scald, hard end, black end, internal breakdown, decay, worms and worm holes, and from damage caused by broken skins, limbrubs, sprayburn, sunburn, scab, russeting, bruises, hail, frost, drought spot, disease, insects, mechanical or other means. Unless otherwise specified, the pears shall not be further advanced than yellowish green. Tree-ripened pears and pears grown from late blooms shall not be considered as meeting the requirements of this grade. (See §§ 51.1349 and 51.1350.)

§ 51.1347 U.S. No. 2.

''U.S. No. 2'' consists of pears of one variety which are mature, handpicked, firm, not seriously deformed, free from scald, hard end, black end, internal breakdown, decay, worms and worm holes, and free from serious damage by any other cause. Unless otherwise specified, the pears shall not be further advanced than yellowish green. Tree-ripened pears and pears grown from late blooms shall not be considered as meeting the requirements of this grade. (See §§ 51.1349 and 51.1350.)

CULLS

§ 51.1348 Culls.

''Culls'' are pears which do not meet the requirements of either of the foregoing grades.

SIZE

§ 51.1349 Size.

Size may be specified in connection with a grade by agreement between buyer and seller and stated in terms of minimum diameter or minimum and maximum diameters. Diameters shall be specified in inches and not less than eighth-inch fractions thereof. In addition, size may be stated in terms of ratio of length to diameter.

APPLICATION OF STANDARDS

§ 51.1350 Application of standards.

(a) Tolerances shall not apply in the application of the standards to determine the percentages of U.S. No. 1 and U.S. No. 2 quality, culls and off-size in a lot of pears; for example, when determining compliance with a grower-processor contract.

(b) *Tolerances.* The following tolerances, by weight, shall apply when a lot of pears has been sorted to meet a specific grade, such as a shipment to a processor which is intended to meet the requirements of the U.S. No. 1 grade:

(1) *For defects.* 10 percent for pears which fail to meet the requirements of the grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for the defects listed:

(i) 2 percent for pears which are affected by decay.

(ii) 5 percent for pears which are infested by worms or have worm holes.

(2) *For off-size.* 5 percent for pears which are smaller than any specified minimum size, and 10 percent for pears larger than any specified maximum size.

DEFINITIONS

§ 51.1351 Mature.

Mature means that the pear has reached the stage of maturity which will insure the proper completion of the ripening process.

§ 51.1352 Handpicked.

Handpicked means that the pears do not show evidence of having been on the ground.

§51.1353 Firm.

Firm means that the pear is fairly solid and yields only very slightly to moderate pressure, and is not wilted, shriveled, rubbery or flabby.

§51.1354 Well formed.

Well formed means that the pear has the shape characteristic of the variety, so that after paring, cutting in halves, and coring, each half of the pear shall be well formed. Bartlett pears shall have at least a fairly well developed neck.

[35 FR 6958, May 1, 1970, as amended at 35 FR 7249, May 8, 1970. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§51.1355 Damage.

Damage means any injury or defect which materially affects the processing quality of the fruit. After paring, cutting in halves, and coring, each half of the pear shall be well formed or the pear is considered damaged. Pears showing surface blemishes shall be considered damaged when the injury cannot be completely removed in the ordinary process of paring for commercial use.

§51.1356 Pears grown from late blooms.

Pears grown from late blooms. Such pears often have excessively long stems (commonly termed ''rat tails''), or may be misshapen or slightly rough. Such pears do not ripen properly for ordinary canning use.

§51.1357 Seriously deformed.

Seriously deformed means that the pear is so badly misshapen as to cause a loss during the usual commercial preparation for use of over 20 percent, by weight, of the pear in excess of that which would occur if the pear were well formed. Round or apple-shaped pears shall not be considered seriously deformed.

§51.1358 Serious damage.

Serious damage means any injury or defect which cannot be removed during the usual commercial preparation for use without a loss of over 20 percent, by weight, of the pear in excess of that which would occur if the pear were not defective.

§51.1359 Diameter.

Diameter means the greatest dimension of the pear taken at right angles to a line running from the stem to the blossom end.

Subpart—United States Standards for Grades of Pecans in the Shell[1]

SOURCE: 41 FR 39303, Sept. 15, 1976, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§51.1400 U.S. No. 1.

''U.S. No. 1'' consists of pecans in the shell which meet the following requirements:

(a) Free from loose extraneous or foreign material.

(b) Shells are: (1) Fairly uniform in color; and,

(2) Free from damage by any cause.

(c) Kernels are: (1) Free from damage by any cause.

(d) For tolerances see §51.1404.

§51.1401 U.S. No. 2.

The requirements for this grade are the same as for U.S. No. 1 except for:

(a) No requirement for uniformity of color of shells; and,

(b) Increased tolerances for defects see §51.1404.

SIZE CLASSIFICATION

§51.1402 Size classification.

Size of pecans may be specified in connection with the grade in accordance with one of the following classifications. To meet the requirements for any one of these classifications, the lot must conform to both the specified number of nuts per pound and the weight of the 10 smallest nuts per 100 nut sample.

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

Size classification	Number of nuts per pound	Minimum weight of the 10 smallest nuts in a 100-nut sample
Oversize	55 or less	In each classification, the 10 smallest nuts per 100 must weigh at least 7 pct of the total weight of a 100-nut sample.
Extra large	56 to 63	
Large	64 to 77	
Medium	78 to 95	
Small	96 to 120	

KERNEL COLOR CLASSIFICATION

§ 51.1403 Kernel color classification.

(a) The skin color of pecan kernels may be described in terms of the color classifications provided in this section. When the color of kernels in a lot generally conforms to the ''light'' or ''light amber'' classification, that color classification may be used to describe the lot in connection with the grade.

(1) ''Light'' means that the outer surface of the kernel is mostly golden color or lighter, with not more than 25 percent of the outer surface darker than golden, none of which is darker than light brown.

(2) ''Light amber'' means that more than 25 percent of the outer surface of the kernel is light brown, with not more than 25 percent of the outer surface darker than light brown, none of which is darker than medium brown.

(3) ''Amber'' means that more than 25 percent of the outer surface of the kernel is medium brown, with not more than 25 percent of the outer surface darker than medium brown, none of which is darker than dark brown (very dark-brown or blackish-brown discoloration).

(4) ''Dark amber'' means that more than 25 percent of the outer surface of the kernel is dark brown, with not more than 25 percent of the outer surface darker than dark brown (very dark-brown or blackish-brown discoloration).

(b) U.S. Department of Agriculture kernel color standards, Pec–MC–1, consisting of plastic models of pecan kernels, illustrate the color intensities implied by the terms ''golden,'' ''light brown,'' ''medium brown'' and ''dark brown'' referred to in paragraph (a) of this section. These color standards may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such service. Duplicates of the color standards may be purchased from NASCO, Fort Atkinson, Wisconsin 53538.

TOLERANCES

§ 51.1404 Tolerances.

In order to allow the variations incident to proper grading and handling in each of the foregoing grades, the following tolerances are provided as specified:

(a) *U.S. No. 1*—(1) *For shell defects, by count.* (i) 5 percent for pecans with damaged shells, including therein not more than 2 percent for shells which are seriously damaged.

(2) *For kernel defects, by count.* (i) 12 percent for pecans with kernels which fail to meet the requirements for the grade or any specified color classification, including therein not more than 7 percent for kernels which are seriously damaged: *Provided,* That not more than six-sevenths of this amount, or 6 percent, shall be allowed for kernels which are rancid, moldy, decayed or injured by insects: *And provided further,* That included in this 6 percent tolerance not more than one-half of one percent shall be allowed for pecans with live insects inside the shell.

(ii) In addition, 8 percent for kernels which fail to meet the color requirements for the grade or for any specified color classification, but which are not seriously damaged by dark discoloration of the skin: *Provided,* That these kernels meet the requirements for the grade other than for skin color.

(3) *For loose extraneous or foreign material, by weight.* (i) 0.5 percent (one-half of 1 percent).

(b) *U.S. No. 2*—(1) *For shell defects, by count.* (i) 10 percent for pecans with damaged shells, including therein not more than 3 percent for shells which are seriously damaged.

(2) *For kernel defects, by count.* (i) 30 percent for pecans with kernels which fail to meet the requirements of the U.S. No. 1 grade, including therein not more than 10 percent for pecans with kernels which are seriously damaged: *Provided,* That not more than seven-tenths of this amount, or 7 percent, shall be allowed for kernels which are

rancid, moldy, decayed or injured by insects: *And provided further,* That included in this 7 percent tolerance not more than one-half of one percent shall be allowed for pecans with live insects inside the shell.

(3) *For loose extraneous or foreign material, by weight.* (i) 0.5 percent (one-half of 1 percent).

APPLICATION OF TOLERANCES

§51.1405 Application of tolerances.

Individual 100–count samples shall have not more than one and one-half times a specified tolerance of 5 percent or more and not more than double a tolerance of less than 5 percent, except that at least one pecan which is seriously damaged by live insects inside the shell is permitted: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade.

SAMPLE FOR GRADE OR SIZE DETERMINATION

§51.1406 Sample for grade or size determination.

Each sample shall consist of 100 pecans. The individual sample shall be drawn at random from a sufficient number of packages to form a 100-count composite sample. The number of such individual 100-count samples drawn for grade or size determination will vary with the size of the lot. When practicable, at point of packaging the sample may be obtained from the grading belt after sorting has been completed.

DEFINITIONS

§51.1407 Fairly uniform in color.

Fairly uniform in color means that the shells do not show sufficient variation in color to materially detract from the general appearance of the lot.

§51.1408 Loose extraneous or foreign material.

Loose extraneous or foreign material means loose hulls, empty broken shells, or any substance other than pecans in the shell or pecan kernels.

§51.1409 Well developed.

Well developed means that the kernel has a large amount of meat in proportion to its width and length (see Figure 1).

§51.1410 Fairly well developed.

Fairly well developed means that the kernel has at least a moderate amount of meat in proportion to its width and length. Shriveling and hollowness shall be considered only to the extent that they have reduced the meatiness of the kernel (see Figure 1).

§51.1411 Poorly developed.

Poorly developed means that the kernel has a small amount of meat in proportion to its width and length (see Figure 1).

PECAN CROSS SECTION ILLUSTRATION

1. WELL DEVELOPED

Lower limit. Kernels having less meat content than these are not considered well developed.

2. FAIRLY WELL DEVELOPED

Lower limit for U.S. No. 1 grade. Kernels having less meat content than these are not considered fairly well developed and are classed as damaged.

3. POORLY DEVELOPED

Lower limit, damaged but not seriously damaged. Kernels having less meat content than these are considered undeveloped and are classed as seriously damaged.

FIGURE 1

§ 51.1412 Well cured.

Well cured means that the kernel separates freely from the shell, breaks cleanly when bent, without splintering, shattering, or loosening the skin; and the kernel appears to be in good shipping or storage condition as to moisture content.

§ 51.1413 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, or any other defect, or any combination of defects, which materially detracts from the appearance or the edible or marketing quality of the individual pecan or the general appearance of the pecans in the lot. The following defects shall be considered as damage:

(a) Adhering hull material or dark stains affecting an aggregate of more than 5 percent of the surface of the individual shell;

(b) Split or cracked shells when the shell is spread apart or will spread upon application of slight pressure;

(c) Broken shells when any portion of the shell is missing;

(d) Kernels which are not well cured;

(e) Poorly developed kernels;

(f) Kernels which are dark amber in color;

(g) Kernel spots when more than one dark spot is present on either half of the kernel, or when any such spot is more than one-eighth inch (3 mm) in greatest dimension;

(h) Adhering material from the inside of the shell when firmly attached to more than one-third of the outer surface of the kernel and contrasting in color with the skin of the kernel; and,

(i) Internal flesh discoloration of a medium shade of gray or brown extending more than one-fourth inch (6 mm) lengthwise beneath the center ridge, or any equally objectionable amount in other portions of the kernel; or lesser areas of dark discoloration affecting the appearance to an equal or greater extent.

§ 51.1414 Serious damage.

Serious damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, or any other defect, or any combination of defects, which seriously detracts from the appearance or the edible or marketing quality of the individual pecan. The following defects shall be considered as serious damage:

(a) Adhering hull material or dark stains affecting an aggregate of more than 20 percent of the individual shell;

(b) Broken shells when the missing portion of shell is greater in area than a circle one-fourth inch (6 mm) in diameter;

(c) Worm holes when penetrating the shell;

(d) Rancidity when the kernel is distinctly rancid to the taste. Staleness of flavor shall not be classed as rancidity;

(e) Mold, on the surface or inside the kernel, which is plainly visible without magnification;

(f) Decay affecting any portion of the kernel;

(g) Insect injury when the insect, web or frass is present inside the shell, or the kernal shows distinct evidence of insect feeding;

(h) Kernel spots when more than three dark spots on either half of the kernel, or when any spot or the aggregate of two or more spots on one of the halves of the kernel affects more than 10 percent of the surface;

(i) Dark discoloration of the skin which is darker than dark amber over more than 25 percent of the outer surface of the kernel;

(j) Internal flesh discoloration of a dark shade extending more than one-third the length of the kernel beneath the ridge, or an equally objectionable amount of dark discoloration in other portions of the kernel; and,

(k) Undeveloped kernels having practically no food value, or which are blank (complete shell containing no kernel).

§ 51.1415 Inedible kernels.

Inedible kernels means that the kernel or pieces of kernels are rancid, moldy, decayed, injured by insects or otherwise unsuitable for human consumption.

OPTIONAL DETERMINATIONS

§ 51.1416 Optional determinations.

The determinations set forth herein are not requirements of these standards. They may be performed upon request in connection with the grade determination or as a separate determination. Samples of pecans for these determinations shall be taken at random from a composite sample drawn throughout the lot.

(a) *Edible kernel content.* A minimum sample of at least 500 grams of in-shell pecans shall be used for determination of edible kernel content. After the sample is weighed and shelled, edible appearing half kernels and pieces of kernels shall be separated from shells, center wall, and other non-kernel material, and inedible kernels (see § 51.1415) and pieces of kernels, and weighed to determine edible kernel content for the lot.

(b) *Poorly developed kernel content.* A minimum sample of at least 500 grams of in-shell pecans shall be used for determination of poorly developed kernel content. The amount of poorly developed kernels and pieces of kernels shall be weighed to determine poorly developed kernel content of the lot (see § 51.1411 and Figure 1).

(c) *Edible kernel content color classification.* The amount of ''Light,'' ''Light amber,'' ''Amber,'' ''Dark amber'' and darker shades of skin color shall be determined according to § 51.1403, Kernel Color Classification. The total weight of edible kernels and pieces of kernels shall be the basis for determining color classification content for the lot.

(d) *Kernel moisture content.* The sample of pecans for determination of kernel moisture content shall be shelled immediately before analysis and all shells, center wall and other non-kernel material removed. The air-oven or other methods or devices which give equivalent results shall be used for moisture content determination.

Subpart—United States Standards for Grades of Shelled Pecans

SOURCE: 34 FR 9377, June 14, 1969, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1430 U.S. No. 1 Halves.

''U.S. No. 1 Halves'' consists of pecan half-kernels which meet the following requirements:

(a) For quality:

(1) Well dried;

(2) Fairly well developed;

(3) Fairly uniform in color;

(4) Not darker than ''amber'' skin color;

(5) Free from damage or serious damage by any cause;

(6) Free from pieces of shell, center wall and foreign material; and,

(7) Comply with tolerances for defects (see § 51.1439); and,

(b) For size:

(1) Halves are fairly uniform in size;

(2) Halves conform to size classification or count specified; and,

(3) Comply with tolerances for pieces, particles, and dust (see § 51.1437).

§ 51.1431 U.S. No. 1 Halves and Pieces.

The requirements for this grade are the same as those for U.S. No. 1 Halves except:

(a) For size:

(1) At least 50 percent, by weight, are half-kernels;

(2) Both halves and pieces will not pass through a 5/16–inch round opening; and,

(3) Comply with tolerances for undersize. (See Table III.)

§ 51.1432 U.S. No. 1 Pieces.

The requirements for this grade are the same as those for U.S. No. 1 Halves except:

(a) For quality:

(1) No requirement for uniformity of color; and,

(b) For size:

(1) No requirement for percentage of half-kernels;

(2) Conform to any size classification or other size description specified; and,

(3) Comply with applicable tolerances for off-size. (See Table III.)

§51.1433 U.S. Commercial Halves.

The requirements for this grade are the same as those for U.S. No. 1 Halves except:

(a) For quality:

(1) No requirement for uniformity of color; and,

(2) Increased tolerances for defects (see §51.1439); and,

(b) For size:

(1) No requirement for uniformity of size.

§51.1434 U.S. Commercial Halves and Pieces.

The requirements for this grade are the same as those for U.S. No. 1 Halves and Pieces except:

(a) For quality:

(1) No requirement for uniformity of color; and,

(2) Increased tolerances for defects. (See §51.1439.)

§51.1435 U.S. Commercial Pieces.

The requirements for this grade are the same as those for U.S. No. 1 Pieces except for:

(a) Increased tolerances for defects. (See §51.1439.)

COLOR CLASSIFICATIONS

§51.1436 Color classifications.

(a) The skin color of pecan kernels may be described in terms of the color classifications provided in this section. When the color of kernels in a lot generally conforms to the ''light'' or ''light amber'' classification, that color classification may be used to describe the lot in connection with the grade.

(1) ''Light'' means that the kernel is mostly golden color or lighter, with not more than 25 percent of the surface darker than golden, and none of the surface darker than light brown.

(2) ''Light amber'' means that the kernel has more than 25 percent of its surface light brown, but not more than 25 percent of the surface darker than light brown, and none of the surface darker than medium brown.

(3) ''Amber'' means that the kernel has more than 25 percent of the surface medium brown, but not more than 25 percent of the surface darker than medium brown, and none of the surface darker than dark brown (very dark-brown or blackish-brown discoloration).

(4) ''Dark amber'' means that the kernel has more than 25 percent of the surface dark brown, but not more than 25 percent of the surface darker than dark brown (very dark-brown or blackish-brown discoloration).

(b) U.S. Department of Agriculture kernel color standards, PEC–MC–1, consisting of plastic models of pecan kernels, illustrate the color intensities implied by the terms ''golden,'' ''light brown,'' ''medium brown,'' and ''dark brown'' referred to in paragraph (a) of this section. These color standards may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such Service. Duplicates of the color standards may be purchased from NASCO, Fort Atkinson, Wis. 53538.

SIZE CLASSIFICATIONS

§51.1437 Size classifications for halves.

The size of pecan halves in a lot may be specified in accordance with one of the size classifications shown in Table I:

TABLE I

Size classifications for halves	Number of halves per pound
Mammoth	250 or less.
Junior mammoth	251–300.
Jumbo	301–350.
Extra large	351–450.
Large	451–550.
Medium	551–650.
Small (topper)	651–750.
Midget	751 or more.

(a) The number of halves per pound shall be based upon the weight of half-kernels after all pieces, particles and dust, shell, center wall, and foreign material have been removed.

(b) In lieu of the size classifications in Table I, the size of pecan halves in a lot may be specified in terms of the number of halves or a range of numbers of halves per pound. For example, ''400'' or ''600–700''.

(c) Tolerance for count per pound: In order to allow for variations incident

to proper sizing, a tolerance shall be permitted as follows:

(1) When an exact number of halves per pound is specified, the actual count per pound may vary not more than 5 percent from the specified number; and,

(2) When any size classification shown in Table I or a range in count per pound is specified, no tolerance shall be allowed for counts outside of the specified range.

(d) *Tolerances for pieces, particles, and dust.* In order to allow for variations incident to proper sizing and handling, not more than 15 percent, by weight, of any lot may consist of pieces, particles, and dust: *Provided,* That not more than one-third of this amount, or 5 percent, shall be allowed for portions less than one-half of a complete half-kernel, including not more than 1 percent for particles and dust.

§ 51.1438 Size classifications for pieces.

The size of pecan pieces in a lot may be specified in accordance with one of the size classifications shown in Table II.

TABLE II

Size classification	Maximum diameter (will pass through round opening of following diameter)	Minimum diameter (will not pass through round opening of following diameter) (inch)
Mammoth pieces	No limitation	8/16
Extra large pieces	9/16 inch	7/16
Halves and pieces	No limitation	5/16
Large pieces	8/16 inch	5/16
Medium pieces	6/16 inch	3/16
Small pieces	4/16 inch	2/16
Midget pieces	3/16 inch	1/16
Granules	2/16 inch	1/16

(a) In lieu of the size classifications in Table II, the size of pieces in a lot may be specified in terms of minimum diameter, or as a range described in terms of minimum and maximum diameters expressed in sixteenths or sixty-fourths of an inch.

(b) Tolerances for size of pieces: In order to allow for variations incident to proper sizing, tolerances are provided for pieces in a lot which fail to meet the requirements of any size specified. The tolerances, by weight, are shown in Table III.

TABLE III

[Percent]

Size classification	Total tolerance for offsize pieces	Tolerance (included in total tolerance) for pieces smaller than	
		2/16	1/16 inch
Mammoth pieces	15	1	.....
Extra large pieces	15	1	.....
Halves and pieces	15	1	.....
Large pieces	15	1	.....
Medium pieces	15	2	.....
Small pieces	15	2	.....
Midget pieces	15	.....	2
Granules	15	.....	5
Other specified size	15	1	.....

TOLERANCES FOR DEFECTS

§ 51.1439 Tolerances for defects.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by weight, are provided as specified:

(a) U.S. No. 1 Halves, U.S. No. 1 Halves and Pieces, and U.S. No. 1 Pieces grades:

(1) 0.05 percent for shell, center wall, and foreign material;

(2) 3 percent for portions of kernels which are ''dark amber'' or darker color, or darker than any specified lighter color classification but which are not otherwise defective; and,

(3) 3 percent for portions of kernels which fail to meet the remaining requirements of the grade, including therein not more than 0.50 percent for defects causing serious damage: *Provided,* That any unused portion of this tolerance may be applied to increase the tolerance for kernels which are ''dark amber'' or darker color, or darker than any specified lighter color classification.

(b) U.S. Commercial Halves, U.S. Commercial Halves and Pieces, and U.S. Commercial Pieces grades:

(1) 0.15 percent for shell, center wall, and foreign material;

(2) 25 percent for portions of kernels which are ''dark amber'' or darker color, or darker than any specified lighter color classification, but which are not otherwise defective; and,

(3) 8 percent for portions of kernels which fail to meet the remaining requirements of the grade, including

therein not more than 1 percent for defects causing serious damage.

APPLICATION OF STANDARDS

§ 51.1440 Application of standards.

The grade of a lot of shelled pecans shall be determined on the basis of a composite sample drawn at random from containers in various locations in the lot. However, any identifiable container or number of containers in which the pecans are obviously of a quality or size materially different from that in the majority of containers, shall be considered as a separate lot, and shall be sampled and graded separately.

DEFINITIONS

§ 51.1441 Half-kernel.

Half-kernel means one of the separated halves of an entire pecan kernel with not more than one-eighth of its original volume missing, exclusive of the portion which formerly connected the two halves of the kernel.

§ 51.1442 Piece.

Piece means a portion of a kernel which is less than seven-eighths of a half-kernel, but which will not pass through a round opening two-sixteenths inch in diameter.

§ 51.1443 Particles and dust.

Particles and dust means, for all size designations except ''midget pieces'' and ''granules,'' fragments of kernels which will pass through a round opening two-sixteenths inch in diameter.

§ 51.1444 Well dried.

Well dried means that the portion of kernel is firm and crisp, not pliable or leathery.

§ 51.1445 Fairly well developed.

Fairly well developed means that the kernel has at least a moderate amount of meat in proportion to its width and length. (See Figure 1.)

§ 51.1446 Poorly developed.

Poorly developed means that the kernel has a small amount of meat in proportion to its width and length. (See Figure 1.)

§ 51.1447 Fairly uniform in color.

Fairly uniform in color means that 90 percent or more of the kernels in the lot have skin color within the range of one or two color classifications.

§ 51.1448 Fairly uniform in size.

Fairly uniform in size means that, in a representative sample of 100 halves, the 10 smallest halves weigh not less than one-half as much as the 10 largest halves.

§ 51.1449 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, or any other defect, or any combination of defects, which materially detracts from the appearance or the edible or marketing quality of the individual portion of the kernel or of the lot as a whole. The following defects should be considered as damage:

(a) Adhering material from inside the shell when attached to more than one-fourth of the surface on one side of the half-kernel or piece;

(b) Dust or dirt adhering to the kernel when conspicuous;

(c) Kernel which is not well dried;

(d) Kernel which is ''dark amber'' or darker color;

(e) Kernel having more than one dark kernel spot, or one dark kernel spot more than one-eighth inch in greatest dimension;

(f) Shriveling when the surface of the kernel is very conspicuously wrinkled;

(g) Internal flesh discoloration of a medium shade of gray or brown extending more than one-fourth the length of the half-kernel or piece, or lesser areas of dark discoloration affecting the appearance to an equal or greater extent; and,

(h) Poorly developed kernel. (See Figure 1.)

§ 51.1450 Serious damage.

Serious damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, or any other defect, or any combination of defects, which seriously detracts from the appearance or the edible or marketing quality of the individual portion of

kernel or of the lot as a whole. The following defects shall be considered as serious damage:

(a) Any plainly visible mold;

(b) Rancidity when the kernel is distinctly rancid to the taste. Staleness of flavor shall not be classed as rancidity;

(c) Decay affecting any portion of the kernel;

(d) Insects, web, or frass or any distinct evidence of insect feeding on the kernel;

(e) Internal discoloration which is dark gray, dark brown, or black and extends more than one-third the length of the half-kernel or piece;

(f) Adhering material from inside the shell when attached to more than one-half of the surface on one side of the half-kernel or piece;

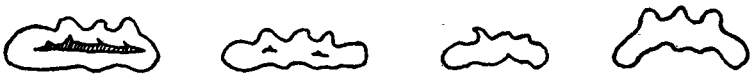
(g) Dark kernel spots when more than three are on the kernel, or when any dark kernel spot or the aggregate of two or more spots affect an area of more than 10 percent of the surface of the half-kernel or piece;

(h) Dark skin discoloration, darker than ''dark brown,'' when covering more than one-fourth of the surface of the half-kernel or piece; and,

(i) Undeveloped kernel. (See Figure 1.)

FIGURE 1

CROSS SECTION ILLUSTRATION



1. WELL DEVELOPED

Lower limit. Kernels having less meat content than these are not considered well developed.

2. FAIRLY WELL DEVELOPED

Lower limit for U. S. No. 1 grade. Kernels having less meat content than these are not considered fairly well developed and are classed as damaged.

3. POORLY DEVELOPED

Lower limit, damaged but not seriously damaged. Kernels having less meat content than these are considered undeveloped and are classed as seriously damaged.

METRIC CONVERSION TABLE

§ 51.1451 Metric conversion table.

Inches	Milli-meters (mm)
8/16	12.7
7/16	11.1
6/16	9.5
5/16	7.9
4/16	6.4
3/16	4.8
2/16	3.2
6/64	2.4
5/64	2.0
1/16	1.6

Subpart—United States Standards for Grades of Fresh Plums and Prunes[1]

SOURCE: 31 FR 6240, Apr. 23, 1966, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1520 U.S. Fancy.

''U.S. Fancy'' consists of plums or prunes of one variety which are well formed, clean, mature but not overripe or soft or shriveled; which are free from decay, sunscald, heat injury, sunburn, split pits and hail marks, and free from damage caused by broken skins, growth cracks, drought spots, gum spots, russeting, scars, other disease, insects or mechanical or other means.

(a) Italian type prunes shall be well colored and, unless otherwise specified, shall be not less than 1¼ inches in diameter. (See § 51.1525.)

[31 FR 6240, Apr. 23, 1966, as amended at 38 FR 13321, May 21, 1973. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.1521 U.S. No. 1.

''U.S. No. 1'' consists of plums or prunes of one variety which are well formed, clean, mature but not overripe or soft or shriveled; which are free from decay and sunscald, and free from damage caused by broken skins, heat injury, growth cracks, sunburn, split pits, hail marks, drought spots, gum spots, russeting, scars, other disease, insects or mechanical or other means.

(a) Italian type prunes shall be fairly well colored and, unless otherwise specified, shall be not less than 1¼ inches in diameter. (See § 51.1525.)

[31 FR 6240, Apr. 23, 1966, as amended at 38 FR 13321, May 21, 1973. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.1522 U.S. Combination.

''U.S. Combination'' consists of a combination of U.S. No. 1 and U.S. No. 2 plums or prunes: *Provided,* That at least 75 percent, by count, meet the requirements of U.S. No. 1 grade. (See § 51.1525.)

§ 51.1523 U.S. No. 2.

''U.S. No. 2'' consists of plums, or prunes of one variety which are not badly misshapen, which are clean, mature but not overripe or soft or shriveled; which are free from decay and sunscald, and free from serious damage caused by broken skins, heat injury, growth cracks, sunburn, split pits, hail marks, drought spots, gum spots, russeting, scars, other disease, insects or mechanical or other means. (See § 51.1525.)

UNCLASSIFIED

§ 51.1524 Unclassified.

''Unclassified'' consists of plums or prunes which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.1525 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

(a) *U.S. Fancy and U.S. No. 1*—(1) *For defects of plums or prunes other than Italian type prunes at shipping point.*[2] 8 percent for fruit which fails to meet the requirements of the specified grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for fruit which is affected by decay.

(2) *For defects of plums or prunes other than Italian type prunes en route or at destination.* 12 percent for fruit which fails to meet the requirements of the specified grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for permanent defects;

(ii) 6 percent for defects causing serious damage, including therein not more than 4 percent for serious damage by permanent defects and not more than 2 percent for decay.

(3) *For defects of Italian type prunes at shipping point.*[2] Not more than a total of 12 percent of the fruit in any lot may fail to meet the requirements of the specified grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for the defects listed:

(i) 10 percent for prunes which fail to meet the color requirement;

(ii) 10 percent for prunes which fail to meet the minimum diameter requirement;

(iii) 8 percent for prunes which fail to meet the remaining requirements of the grade: *Provided,* That not more than one-half of this amount, or 4 percent, shall be allowed for defects causing serious damage, including in the latter amount not more than one-half of 1 percent for decay.

(4) *For defects of Italian type prunes en route or at destination.* Not more than a total of 18 percent of the fruit in any lot may fail to meet the requirements of the specified grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for the defects listed:

(i) 12 percent for permanent defects including therein not more than 10 percent which fail to meet the color requirement, 10 percent which fail to meet the minimum diameter requirement, and 8 percent which fail to meet the requirements of the grade because of other permanent defects;

(ii) 6 percent for defects causing serious damage, including therein not more than 4 percent for serious damage by permanent defects and not more than 2 percent for decay.

(b) *U.S. Combination and U.S. No. 2*—(1) *For defects at shipping point.*[2] 8 percent for fruit which fails to meet the requirements of the specified grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for sunscald, decay or serious damage by insects or heat injury, including in this latter amount not more than one-half of 1 percent for decay.

(2) *For defects en route or at destination.* 12 percent for fruit which fails to meet the requirements of the specified grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for permanent defects including therein not more than 4 percent for sunscald, or serious damage by insects or heat injury; and,

(ii) 2 percent for decay.

(3) When applying the tolerance for the U.S. Combination grade individual packages may have not more than 10 percent less than the percentage of U.S. No. 1 required: *Provided,* That the entire lot averages within the required percentage. (See § 51.1526.)

APPLICATION OF TOLERANCES

§ 51.1526 Application of tolerances.

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

(a) A package may contain not more than double any specified tolerance except that at least two defective and two off-size specimens may be permitted in any package: *Provided,* That the averages for the entire lot are

[2] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

within the tolerances specified for the grade.

STANDARD PACK

§ 51.1527 Standard pack.

(a) *Packing.* (1) All packages shall be tightly packed or well filled, according to the approved and recognized methods.

(2) The plums or prunes in the top layer of any package shall be reasonably representative in quality and size of those in the remainder of the package.

(3) *Four-basket crates.* Four-basket crates shall not be packed more than three layers deep.

(i) The arrangement of the bottom layer shall be one row less one way, and may be one row less each way than the arrangement of the top layer; the arrangement of the middle layer may be the same as the top layer, or may be one row less one way than the arrangement of the top layer.

(ii) In the 3½—4x5 and 3½—4x4 packs the face of each half of the crate shall be packed as a unit, with no shim between the two baskets.

(b) *Marking.* (1) The size of plums or prunes shall be marked on each package, and shall be indicated in terms of minimum diameter, or number of fruit per package, or in accordance with the arrangement of the top layer of fruit in the package or subcontainer, or in terms of the four-basket crate designation for fruit of equivalent sizes. Size may also be shown in terms of maximum number of fruit for a specified weight, such as ''8 per pound,'' ''6.4 per pound'' or ''7⅔ per pound.''

(i) *Four-basket crates.* The size of plums packed in four-basket crates shall be indicated in accordance with the arrangement in the top layer of the baskets, as follows: 6x6, 5x5, or 4x4 (square packs); 5x6, 4x5, or 3x4 (offset packs); 3½—4x5, 3—4x5, 3½—4x4, or 3—4x4 (diagonal packs).

(ii) *California peach boxes, lug boxes and small consumer packages.* In layer-packed California peach boxes or lug boxes, and in small consumer packages, the count of the entire contents shall be marked on the package. The number of plums or prunes in California peach boxes or lug boxes shall not vary more than 4 from the number indicated on the package.

(iii) *Face and fill packs in cartons and lug boxes.* In face and fill packs in cartons and lug boxes the number of rows in the face shall be marked on the package, as ''6 row'', ''8 row'', etc.

(c) *Sizing.* (1) Not more than 5 percent, by count, of the plums or prunes in any package may vary more than one-fourth inch in diameter.

(2) When size is indicated in terms of minimum diameter, not more than 5 percent, by count, of the fruit in any package may be smaller than the size marked.

(d) *Tolerance for standard pack.* In order to allow for variations incident to proper sizing and packing, not more than 10 percent, by count, of the packages in any lot may fail to meet the requirements for standard pack.

[34 FR 7499, May 9, 1969. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

DEFINITIONS

§ 51.1528 Well formed.

Well formed means that the fruit has the shape characteristic of the variety. Doubles shall not be considered well formed.

§ 51.1529 Clean.

Clean means that the fruit is practically free from dirt and other foreign material.

§ 51.1530 Mature.

Mature means that the fruit has reached the stage of maturity which will insure a proper completion of the ripening process.

§ 51.1531 Sunscald.

Sunscald means injury caused by the sun in which softening or collapse of the flesh is apparent.

§ 51.1532 Damage.

Damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the

fruit. The following specific defects shall be considered as damage:

(a) Broken skins which are unhealed except those caused by pulled stems where the skin is torn only slightly within the stem cavity. (Healed skin breaks shall be considered scars);

(b) Heat injury, sprayburn or sunburn:

(1) When the skin is blistered, cracked or decidedly flattened;

(2) When the normal color of the skin or flesh has materially changed;

(3) When there is more than one indentation; or,

(4) When an indentation exceeds three-sixteenths inch in diameter;

(c) Growth cracks:

(1) When not healed;

(2) When more than one in number;

(3) When more than one-eighth inch in depth;

(4) When more than three-eighths inch in length if within the stem cavity; or,

(5) When more than one-fourth inch in length if outside of the stem cavity;

(d) Split pit when causing any unhealed crack, or when healed and aggregating more than one-fourth inch in length, or when affecting the shape to the extent that the fruit is not well formed;

(e) Scab or bacterial spot when cracked, or when the aggregate area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the aggregate area exceeds that of a circle three-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(f) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-fourth inch in diameter;

(g) Scale or scale marks when the aggregate area exceeds that of a circle one-fourth inch in diameter;

(h) Scars, including those caused by hail, when the surface of the fruit is depressed more than one-sixteenth inch, or when exceeding any of the following aggregate areas, or a combination of two or more types of scars the seriousness of which exceeds the maximum allowed for any one type:

(1) Dark or rough scars when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle three-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(2) Fairly light colored, fairly smooth scars when, in the case of Italian type prunes, the area exceeds that of a circle one-half inch in diameter; or when, in the case of other types of plums, the area exceeds that of a circle one-half inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle five-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size.

(3) Light colored, smooth scars when, in the case of Italian type prunes, the area exceeds one-twelfth of the fruit surface; or when, in the case of other types of plums, the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle seven-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(4) Twig or limb scratches which are not well healed or which have an aggregate length of more than one-half inch; and

(i) Russeting which exceeds any of the following aggregate areas of any one type of russeting, or a combination of two or more types of russeting the seriousness of which exceeds the maximum allowed for any one type:

(1) Rough russeting when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle one-half inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(2) Slightly rough russeting when, in the case of Italian type prunes, the area exceeds one-twelfth of the fruit surface; or when, in the case of other types of plums, the area exceeds that of a circle five-eighths inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle three-fourths inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(3) Fairly smooth or smooth russeting when, in the case of Italian

type prunes, the area exceeds one-twelfth of the fruit surface; or when, in the case of other types of plums the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle 1 inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size.

§ 51.1533 Well colored.

Well colored, as applied to Italian type prunes, means that 95 percent of the surface of the prune is purple color.

§ 51.1534 Fairly well colored.

Fairly well colored, as applied to Italian type prunes, means that at least three-fourths of the surface of the prune is purple color.

§ 51.1535 Badly misshapen.

Badly misshapen means that the fruit is so malformed or rough that its appearance is seriously affected. Doubles shall be considered badly misshapen, except that doubles of Italian type prunes which have approximately equal halves shall not be considered badly misshapen.

§ 51.1536 Serious damage.

Serious damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detracts from the appearance, or the edible or marketing quality of the fruit. The following specific defects shall be considered as serious damage:

(a) Broken skins which are unhealed when aggregating more than one-eighth inch in diameter, length or depth. (Healed skin breaks shall be considered scars);

(b) Heat injury, sprayburn or sunburn:

(1) When the skin is blistered, cracked or decidedly flattened;

(2) When causing any dark discoloration of the flesh;

(3) When there are more than two indentations;

(4) When the aggregate area of indentations exceeds that of a circle three-eighths inch in diameter; or,

(5) When causing noticeable brownish or darker discoloration over more than one-fourth of the fruit surface;

(c) Growth cracks:

(1) When not healed and more than one-eighth inch in length or depth;

(2) When healed and more than three-sixteenths inch in depth;

(3) When healed and aggregating more than five-eighths inch in length if within the stem cavity; or,

(4) When healed and aggregating more than one-half inch in length if outside of the stem cavity;

(d) Split pit when causing any unhealed crack, or when healed and aggregating more than three-eighths inch in length, or when affecting the shape to the extent that the fruit is badly misshapen;

(e) Scab or bacterial spot, when the aggregate area exceeds that of a circle one-half inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the aggregate area exceeds that of a circle three-fourths inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(f) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-half inch in diameter;

(g) Scale or scale marks when the aggregate area exceeds that of a circle three-eighths inch in diameter;

(h) Russeting and scars, including those caused by hail, when the surface of the fruit is depressed more than three-sixteenths inch, or when exceeding any of the following aggregate areas, or a combination of two or more types of russeting or scars the seriousness of which exceeds the maximum allowed for any one type:

(1) Dark or rough scars or rough russeting when the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4x4 size, or smaller; or when the area exceeds that of a circle one inch in diameter on a fruit larger than 2 inches in diameter or 4x4 size;

(2) Russeting and scars which are not dark or rough when the area exceeds one-fourth of the fruit surface.

(i) Soft or overripe or shriveled plums or prunes;

(j) Plums or prunes affected by decay; and

(k) Plums or prunes affected by sunscald.

§ 51.1537 Diameter.

Diameter means the greatest dimension measured at right angles to a line from the stem to blossom end of the fruit.

[38 FR 13321, May 21, 1973. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

METRIC CONVERSION TABLE

§ 51.1538 Metric conversion table.

Inches	Millimeters (mm)
⅛ equals	3.2
¼ equals	6.4
⅜ equals	9.5
½ equals	12.7
⅝ equals	15.9
¾ equals	19.1
⅞ equals	22.2
1 equals	25.4
1¼ equals	31.8
1½ equals	38.1
1¾ equals	44.5
2 equals	50.8
3 equals	76.2
4 equals	101.6

Subpart—United States Standards for Grades of Potatoes[1]

SOURCE: 35 FR 18258, Dec. 1, 1970, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1540 U.S. Extra No. 1.

''U.S. Extra No. 1'' consists of potatoes which meet the following requirements:

(a) Similar varietal characteristics;

(b) Firm;

(c) Clean;

(d) At least fairly well matured;

(e) Fairly well shaped, with 50 percent or more well shaped;

(f) Free from:

(1) Freezing;

(2) Blackheart;

(3) Late blight, southern bacterial wilt and ring rot; and,

(4) Soft rot and wet breakdown.

(g) Free from injury caused by:

(1) Sprouts; and,

(2) Internal defects.

(h) Free from damage by any other cause. See §§ 51.1564 and 51.1565.

(i) Size. The potatoes shall be not less than 2¼ inches in diameter or 5 ounces in weight and shall not vary more than 1¼ inches in diameter or more than 6 ounces in weight.

(j) For tolerances see § 51.1546.

[35 FR 18258, Dec. 1, 1970; 36 FR 10771, June 3, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.1541 U.S. No. 1.

''U.S. No. 1'' consists of potatoes which meet the following requirements:

(a) Similar varietal characteristics;

(b) Firm;

(c) Fairly clean;[2]

(d) Fairly well shaped;

(e) Free from:

(1) Freezing;

(2) Blackheart;

(3) Late blight, southern bacterial wilt and ring rot; and,

(4) Soft rot and wet breakdown.

(f) Free from damage by any other cause. See §§ 51.1564 and 51.1565.

(g) Size. Not less than 1⅞ inches in diameter, unless otherwise specified in connection with the grade.

(h) For tolerances see § 51.1546.

§ 51.1542 U.S. Commercial.

''U.S. Commercial'' consists of potatoes which meet the requirements of U.S. No. 1 grade except for the following:

(a) Free from serious damage caused by:

(1) Dirt or other foreign matter;

(2) Russet scab; and,

(3) Rhizoctonia.

(b) Increased tolerances for defects specified in § 51.1546.

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food and Drug Cosmetic Act or with applicable State laws and regulations.

[2] Potatoes in containers bearing official State Seed Certification Tags and Seals are not required to be fairly clean but shall be free from damage by dirt.

§ 51.1543 U.S. No. 2.

''U.S. No. 2'' consists of potatoes which meet the following requirements:

(a) Similar varietal characteristics;

(b) Not seriously misshapen;

(c) Free from:

(1) Freezing;

(2) Blackheart;

(3) Late blight, southern bacterial wilt and ring rot; and,

(4) Soft rot and wet breakdown.

(d) Free from serious damage by any other cause. See §§ 51.1564 and 51.1565.

(e) Size. Not less than 1½ inches in diameter, unless otherwise specified in connection with the grade.

(f) For tolerances see § 51.1546.

UNCLASSIFIED

§ 51.1544 Unclassified.

''Unclassified'' consists of potatoes which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

SIZE

§ 51.1545 Size.

(a) The minimum size, or minimum and maximum sizes may be specified in connection with the grade in terms of diameter or weight of the individual potato, or in accordance with one of the size designations in Table I or Table II: *Provided,* That sizes so specified shall not be in conflict with the basic size requirements for the grade.

(b) When size is designated as shown in Table II, the corresponding weight ranges shall apply. These size designations may be applied to potatoes packed in any size container: Provided, that the weight ranges are within the limits specified.

TABLE I

Size designation	Minimum diameter [1] or weight		Maximum diameter [1] or weight	
	Inches	Ounces	Inches	Ounces
Size A[2]	1⅞	([3])	([3])	([3])
Size B	1½	([3])	2¼	([3])
Small	1¾	([3])	2½	6
Medium	2¼	5	3¼	10
Large	3	10	4¼	16

[1] Diameter means the greatest dimension at right angles to the longitudinal axis, without regard to the position of the stem end.

[2] In addition to the minimum size specified, a lot of potatoes designated as Size A shall contain at least 40 percent of potatoes which are 2½ inches in diameter or larger or 6 ounces in weight or larger.

[3] No requirement.

TABLE II

[Ounces]

Size designation	Minimum weight	Maximum weight
Under 50	15	.....
50	12	19
60	10	16
70	9	15
80	8	13
90	7	12
100	6	10
110	5	9
120	4	8
130	4	8
140	4	8
Over 140	4	8

[35 FR 18258, Dec. 1, 1970, as amended at 37 FR 2745, Feb. 5, 1972. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981; amended at 56 FR 7553, Feb. 25, 1991]

TOLERANCES

§ 51.1546 Tolerances.

To allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances by weight or equivalent basis, are provided as specified.

(a) *For defects*—(1) *U.S. Extra No. 1.* A total of 5 percent for potatoes in any lot which fail to meet the requirements for the grade: *Provided,* That not more than two-fifths of this tolerance, or 2 percent, shall be allowed for potatoes which are affected by freezing, southern bacterial wilt, ring rot, late blight, soft rot or wet breakdown, including therein not more than one-half of 1 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See § 51.1547.

(2) *U.S. No. 1.* A total of 8 percent for potatoes in any lot which fail to meet the requirements for the grade: *Provided,* That included in this tolerance

not more than the following percentages shall be allowed for the defects listed:

(i) 5 percent for external defects;

(ii) 5 percent for internal defects; or,

(iii) 3 percent for potatoes which are affected by freezing, southern bacterial wilt, ring rot, late blight, soft rot or wet breakdown, including therein not more than 1 percent for potoatoes which are frozen or affected by soft rot or wet breakdown. See § 51.1547.

(3) *U.S. Commercial.* A total of 20 percent for potatoes in any lot which fail to meet the requirements for the grade: *Provided,* That included in this tolerance not more than the following percentages shall be allowed for the defects listed:

(i) 10 percent for potatoes which fail to meet the requirements for U.S. No. 2 grade, including therein not more than:

(ii) 6 percent for external defects;

(iii) 6 percent for internal defects; or,

(iv) 3 percent for potatoes which are affected by freezing, southern bacterial wilt, ring rot, late blight, soft rot or wet breakdown, including therein not more than 1 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See § 51.1547.

(4) *U.S. No. 2.* A total of 10 percent for potatoes in any lot which fail to meet the requirements for the grade: *Provided,* That included in this tolerance not more than the following percentages shall be allowed for the defects listed:

(i) 6 percent for external defects;

(ii) 6 percent for internal defects; or,

(iii) 3 percent for potatoes which are affected by freezing, southern bacterial wilt, ring rot, late blight, soft rot or wet breakdown, including therein not more than 1 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See § 51.1547.

(b) *For off-size.* (1) Not more than 3 percent of the potatoes in any lot may be smaller than the required or specified minimum size except that a tolerance of 5 percent shall be allowed for potatoes packed to meet a minimum size of 2¼ inches or larger in diameter or 5 ounces or more in weight. In addition, not more than 10 percent may be larger than any required or specified maximum size. See § 51.1547.

(2) When a percentage of the potatoes is specified to be of a certain size and larger, individual samples shall have not less than one-half of the percentage specified: *Provided,* That the average for the entire lot is not less than the percentage specified.

[35 FR 18258, Dec. 1, 1970. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981; amended at 56 FR 7553, Feb. 25, 1991]

APPLICATION OF TOLERANCES

§ 51.1547 Application of tolerances.

Individual samples shall have not more than double the tolerances specified, except that at least one defective and one off-size potato may be permitted in any sample: *Provided,* That en route or at destination one-tenth of the samples may contain three times the tolerance permitted for potatoes which are frozen or affected by soft rot or wet breakdown: *And provided further,* That the averages for the entire lot are within the tolerances specified for the grade.

SAMPLES FOR GRADE AND SIZE DETERMINATION

§ 51.1548 Samples for grade and size determination.

Individual samples shall consist of at least 20 pounds. When individual packages contain at least 20 pounds, each individual sample is drawn from one package; when packages contain less than 20 pounds, a sufficient number of adjoining packages are opened to provide at least a 20-pound sample. The number of such individual samples drawn for grade and size determination will vary with the size of the lot.

SKINNING

§ 51.1549 Skinning.

(a) The following definitions provide a basis for describing lots of potatoes as to the degree of skinning whenever description may be appropriate:

(1) ''Practically no skinning'' means that not more than 5 percent of the potatoes in the lot have more than one-tenth of the skin missing or ''feathered'';

(2) ''Slightly skinned'' means that not more than 10 percent of the potatoes in the lot have more than one-fourth of the skin missing or ''feathered'';

(3) ''Moderately skinned'' means that not more than 10 percent of the potatoes in the lot have more than one-half of the skin missing or ''feathered''; and

(4) ''Badly skinned'' means that more than 10 percent of the potatoes in the lot have more than one-half of the skin missing or ''feathered''.

DEFINITIONS

§ 51.1550 Similar varietal characteristics.

Similar varietal characteristics means that the potatoes in any lot have the same general shape, color and character of skin, and color of flesh.

§ 51.1551 Firm.

Firm means that the potato is not shriveled or flabby.

§ 51.1552 Clean.

Clean means that at least 90 percent of the potatoes in any lot are practically free from dirt or staining and practically no loose dirt or other foreign matter is present in the container.

§ 51.1553 Fairly clean.

Fairly clean means that at least 90 percent of the potatoes in any lot are reasonably free from dirt or staining and not more than a slight amount of loose dirt or foreign matter is present in the container.

§ 51.1554 Mature.

Mature means that the skins of the potatoes are generally firmly set and not more than 5 percent of the potatoes in the lot have more than one-tenth of the skin missing or ''feathered.''

§ 51.1555 Fairly well matured.

Fairly well matured means that the skins of the potatoes are generally fairly firmly set and not more than 10 percent of the potatoes in the lot have more than one-fourth of the skin missing or ''feathered.''

§ 51.1556 Well shaped.

Well shaped means that the potato has the normal shape for the variety.

§ 51.1557 Fairly well shaped.

Fairly well shaped means that the potato is not materially pointed, dumbbell-shaped or otherwise materially deformed.

§ 51.1558 Seriously misshapen.

Seriously misshapen means that the potato is seriously pointed, dumbbell-shaped or otherwise badly deformed.

§ 51.1559 Injury.

Injury means any defect, or any combination of defects, which more than slightly detracts from the edible or marketing quality, or the internal or external appearance of the potato, or any internal defect outside of or nor entirely confined within the vascular ring which cannot be removed without a loss of more than 3 percent of the total weight of the potato.

§ 51.1560 Damage.

Damage means any defect, or any combination of defects, which materially detracts from the edible or marketing quality, or the internal or external appearance of the potato, or any external defect which cannot be removed without a loss of more than 5 percent of the total weight of the potato. See Tables III and IV.

§ 51.1561 Serious damage.

Serious damage means any defect, or any combination of defects, which seriously detracts from the edible or marketing quality, or the internal or external appearance of the potato, or any external defect which cannot be removed without a loss of more than 10 percent of the total weight of the potato. See Tables III and IV.

§ 51.1562 Freezing.

Freezing means that the potato is frozen or shows evidence of having been frozen.

§ 51.1563 Soft rot or wet breakdown.

Soft rot or wet breakdown means any soft, mushy, or leaky condition of the tissue such as slimy soft rot, leak, or

wet breakdown following freezing injury.

§ 51.1564 External defects.

External defects are defects which can be detected externally. However, cutting may be required to determine the extent of the injury. Some external defects are listed in Table III.

TABLE III—EXTERNAL DEFECTS

Defect	Damage		Serious damage	
	When materially detracting from appearance of potato	When removal causes loss of more than 5 percent of total weight of potato	When seriously detracting from appearance of potato	When removal causes loss of more than 10 percent of total weight of potato
Air cracks	X		X	
Bruises	X	X	X	X.
Dirt	X		X	
Enlarged lenticels	X		X	
External discoloration	X		X	
Flea Beetle injury	X	X	X	X.
Greening	X	X	X	X.
Rhizoctonia	X		X	
Scab, pitted	X	X	X	X.
Scab, russet	X		X	
Scab, surface	When more than 5 percent of surface affected.		When more than 25 percent of surface affected.	
Sunburn		X		X.
Second growth	X		X	
Growth cracks	X		X	

Defects	Damage	Serious damage[1]
Wireworm or grass damage.	When any hole in a potato 2½ inches in diameter or 6 ounces in weight is more than ¾ inch long, or when the aggregate length of all holes is more than 1¼ inches, or correspondingly shorter or longer holes in smaller or larger potatoes.	When any hole in a potato 2½ inches in diameter or 6 ounces in weight is more than 1½ inches long, or when the aggregate length of all holes is more than 2 inches, or correspondingly shorter or longer holes in smaller or larger potatoes.
Insects or worms	(See serious damage)	When present inside the potato.
Artificial coloring	When unsightly or when concealing any defect causing damage or when penetrating the flesh and removal causes loss of more than 5 percent of total weight of potato.	When concealing a serious defect or when penetrating into the flesh and removal causes loss of more than 10 percent of total weight of potato.
Sprouts	When more than 10 percent of the potatoes in any lot have any sprout more than ¾ inch in length or have individual sprouts or clusters of sprouts which materially detract from the appearance of the potato.	

[1] The following defects are considered serious damage when present in any degree: 1. Freezing. 2. Late blight. 3. Ring rot. 4. Southern bacterial wilt. 5. Soft rot. 6. Wet breakdown.

§ 51.1565 Internal defects.

Internal defects are defects which cannot be detected without cutting the potato. Some internal defects are listed in Table IV.

TABLE IV—INTERNAL DEFECTS

Defects	Damage, maximum allowed	Serious damage, maximum allowed
Occurring outside of or not entirely confined to the vascular ring		
Ingrown Sprouts, Internal Black Spot, Internal Discoloration, Vascular Browning, Fusarium Wilt, Net Necrosis, Other Necrosis, Stem End Browning.	5% waste	10% waste.

TABLE IV—INTERNAL DEFECTS—Continued

Defects	Damage, maximum allowed	Serious damage, maximum allowed
Occurring entirely within the vascular ring		
Hollow Heart or Hollow Heart with Discoloration.	Area affected not to exceed that of a circle ½ inch in diameter in a potato 2½ inches in diameter or 6 ounces in weight.[1]	Area affected not to exceed that of a circle ¾ inch in diameter in a potato 2½ inches in diameter or 6 ounces in weight.[1]
Light Brown Discoloration (Brown Center).	Area affected not to exceed that of a circle ½ inch in diameter in a potato 2½ inches in diameter or 6 ounces in weight.[1]	Area affected not to exceed that of a circle ¾ inch in diameter in a potato 2½ inches in diameter or 6 ounces in weight.[1]
Internal Brown Spot and Similar Discoloration (Heat Necrosis).	Not more than the equivalent of 3 scattered spots ⅛ inch in diameter in a potato 2½ inches in diameter or 6 ounces in weigth.[1]	Not more than the equivalent of 6 scattered spots ⅛ inch in diameter in a potato 2½ inches in diameter or 6 ounces in weight.[1]

A[1] Note: Correspondingly lesser or greater areas in smaller or larger potatoes.

[35 FR 18258, Dec. 1, 1970. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981; amended at 56 FR 7553, Feb. 25, 1991; 56 FR 10302, Mar. 11, 1991]

METRIC CONVERSION TABLE

§ 51.1566 Metric conversion table.

Inches	Millimeters (mm)
⅛ equals	3.2
¼ equals	6.4
½ equals	12.7
¾ equals	19.1
1 equals	25.4
1½ equals	38.1
2 equals	50.8
2½ equals	63.5
3 equals	76.2
3½ equals	88.9
4 equals	101.6
4½ equals	114.3

Ounces	Grams
1 equals	28.35
4 equals	113.40
5 equals	141.75
6 equals	170.10
7 equals	198.45
8 equals	226.80
9 equals	255.15
10 equals	283.50
12 equals	340.20
14 equals	396.90
16 equals	453.60
18 equals	510.30
19 equals	538.60
20 equals	567.00

Subpart—United States Consumer Standards for Potatoes

SOURCE: 18 FR 7132, Nov. 11, 1953, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.1575 U.S. Grade A Small; U.S. Grade A Medium; U.S. Grade A Medium to Large; U.S. Grade A Large.

Potatoes of each of these grades shall be of one variety or similar varietal characteristics which are fairly well shaped, fairly clean, free from freezing injury, blackheart, late blight, and soft rot or wet breakdown, and from damage caused by sunburn, second growth, growth cracks, air cracks, hollowheart, internal discoloration, cuts, shriveling, sprouting, scab, dry rot, rhizoctonia, other diseases, wireworm, other insects, or mechanical or other means. Potatoes of these grades shall also be mature: *Provided,* That potatoes which are not mature and the outer skin loosens or ''feathers'' readily under the usual handling practices need not meet this requirement if they are firm and are further designated as ''Early'' in connection with the grade, as for example ''U.S. Grade A Medium-Early.'' Potatoes on the shown face shall be reasonably representative in size and quality of the contents of the containers. (See § 51.5177.)

(a) *Tolerances.* Incident to proper grading and handling, except for the tolerances for size, not more than a total of 5 percent, by weight, of the potatoes in any lot may fail to meet the requirements of the grade, including not more than 1 percent for potatoes affected by soft rot or wet breakdown. (See § 51.1579.)

§ 51.1576 U.S. Grade B Small; U.S. Grade B Medium; U.S. Grade B Medium to Large; U.S. Grade B Large.

Potatoes of each of these grades shall meet the requirements for U.S. Grade A Small; U.S. Grade A Medium; U.S. Grade A Medium to Large; and U.S. Grade A Large, except for the increased tolerance for defects specified below. (See § 51.1577.)

(a) *Tolerances.* Incident to proper grading and handling, except for the tolerance for size, not more than a total of 20 percent, by weight, of the potaotes in any lot may fail to meet the requirements of the grade, but not more than 5 percent shall be allowed for potatoes which are seriously damaged by any cause, including not more than 1 percent for potatoes affected by soft rot or wet breakdown. (See § 51.1579.)

SIZE

§ 51.1577 Size range requirements.

In addition to the quality requirements specified for the above grades, potatoes shall also meet the requirements for minimum and maximum diameter or weight, and the tolerances as specified for the various grades in the table appearing in this section. Potatoes specified as meeting one of the grades may be of any size within its size range requirements, except that it is not permissible to specify a lot as ''U.S. Grade A Medium to Large,'' or ''U.S. Grade B Medium to Large,'' unless more than 15 percent, by weight, of the potatoes are larger than the maxiumum size required for U.S. Grade A Medium, or U.S. Grade B Medium, respectively. For example, a lot of round or intermediate-shaped potatoes to be specified as ''U.S. Grade A Medium to Large'' must have more than 15 percent, by weight, of potatoes from 3 to 4 inches in diameter.

Grades	Size range requirements, round or intermediate shaped varieties		Size range requirements, long varieties		Tolerance for size	
	Minimum diameter (*Inches*)	Maximum diameter (*Inches*)	Minimum diam. or wt.	Maximum weight (*Ounces*)	Undersize (*Percent*)	Oversize (*Percent*)
U.S. Grades A & B small	1½	2¼	1½ inches	4	3	15
U.S. Grades A & B medium	2¼	3	4 ounces	10	5	15
U.S. Grades A & B medium to large	2¼	4	4 ounces	16	5	15
U.S. Grades A & B large	3	4	10 ounces	16	5	15

OFF-GRADE

§ 51.1578 Off-Grade potatoes.

Potatoes which fail to meet the requirements of any of the foregoing grades shall be Off-Grade potatoes.

APPLICATION OF TOLERANCES

§ 51.1579 Application of tolerances to individual containers.

(a) Based on sample inspection, the contents of individual containers in the lot are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(1) When a tolerance is 10 percent or more, not more than one-tenth of the individual containers in any lot may contain more than one and one-half times the tolerance specified, except that at least one defective and one off-sized specimen may be permitted in a container.

(2) When a tolerance is less than 10 percent, not more than one-tenth of the individual containers in any lot may contain more than double the tolerance specified, but no package may contain more than four times the tolerance for soft rot or wet breakdown, except that at least one defective and one off-sized specimen may be permitted in a container.

DEFINITIONS

§ 51.1580 Fairly well shaped.

Fairly well shaped means that the appearance of the individual potato or the general appearance of the potatoes in the container is not materially injured by pointed, dumbbell-shaped or otherwise ill-formed potatoes.

§ 51.1581 Fairly clean.

Fairly clean means that from the viewpoint of general appearance, the potatoes in the container are reasonably free from dirt or other foreign matter, and that individual potatoes are not materially caked with dirt or materially stained.

§ 51.1582 Soft rot or wet breakdown.

Soft rot or wet breakdown means any soft, mushy, or leaky condition of the tissue such as slimy soft rot, leak, or wet breakdown following freezing injury, scald, or other injury.

§ 51.1583 Damage.

Damage means any injury or defect which materially injures the edible or shipping quality, or the appearance of the individual potato or the general appearance of the potatoes in the container, or which cannot be removed without a loss of more than 5 percent of the total weight of the potato including peel covering defective area. Loss of outer skin (epidermis) shall not be considered as damage when the potatoes are designated as ''Early'' unless the skinned surface is materially affected by dark discoloration. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Second growth or growth cracks which have developed to such an extent as to materially injure the appearance of the individual potato or the general appearance of the potatoes in the container.

(b) Air cracks which are deep, or shallow air cracks which materially injure the appearance of the individual potato or the general appearance of the potatoes in the container.

(c) Shriveling, when the potato is more than moderately shriveled, spongy, or flabby.

(d) Sprouting, when the sprouts are not dried and are more than one-half inch long.

(e) Surface scab which covers an area of more than 5 percent of the surface of the potato in the aggregate.

(f) Pitted scab which affects the appearance of the potato to a greater extent than the amount of surface scab permitted or causes a loss of more than 5 percent of the total weight of the potato including peel covering defective area.

(g) Rhizoctonia, when the general appearance of the potatoes in the container is materially injured or when individual potatoes are badly infected.

(h) Wireworm, grass root or similar injury, when any hole on potatoes ranging in size from 6 to 8 ounces is longer than three-fourths inch, or when the aggregate length of all holes is more than one and one-fourth inches; smaller potatoes shall have lesser amounts and larger potatoes may have greater amounts, provided, that the removal of the injury by proper trimming does not cause the appearance of such potatoes to be injured to a greater extent than that caused by the proper trimming of such injury permitted on a 6 to 8 ounce potato.

§ 51.1584 Internal discoloration.

Internal discoloration means discoloration such as is caused by net necrosis or any other type of necrosis, stem-end browning, internal brown spot, or other similar types of discoloration not visible externally.

§ 51.1585 Mature.

Mature means that the outer skin (epidermis) does not loosen or ''feather'' readily during the ordinary methods of handling.

§ 51.1586 Serious damage.

Serious damage means any injury or defect which seriously injures the edible or shipping quality, or the appearance of the individual potato or the general appearance of the potatoes in the container, or which cannot be removed without a loss of more than 10

percent of the total weight of the potato including peel covering defective area. Any one of the following defects or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect shall be considered as serious damage:

(a) Fairly smooth cuts such as are made by the digger, or by a knife to remove injury when both ends are clipped, or when more than an estimated one-fourth of the potato is cut away, or, in the case of long varieties, when the remaining portion of the clipped potato weighs less than 6 ounces; irregular types of cuts which seriously affect the appearance of the individual potato, or which cannot be removed without a loss of more than 10 percent of the total weight of the potato including peel covering defective area.

(b) Shriveling, when the potato is excessively shriveled, spongy, or flabby.

(c) Surface scab which covers an area of more than 50 percent of the surface of the potato in the aggregate.

(d) Pitted scab which affects the appearance of the potato to a greater extent than the amount of surface scab permitted or causes a loss of more than 10 percent of the total weight of the potato including peel covering defective area.

(e) Wireworm, grass root or similar injury, when any hole on potatoes ranging in size from 6 to 8 ounces is longer than one and one-fourth inches, or when the aggregate length of all holes is more than two inches; smaller potatoes shall have lesser amounts and larger potatoes may have greater amounts: *Provided*, That the removal of the injury by proper trimming, does not cause the appearance of such potatoes to be injured to a greater extent than that caused by the proper trimming of such injury permitted on a 6 to 8 ounce potato.

§51.1587 Diameter.

Diameter means the greatest dimension at right angles to the longitudinal axis. The long axis shall be used without regard to the position of the stem (rhizome).

SUBPART—UNITED STATES STANDARDS FOR GRADES OF FLORIDA TANGERINES

SOURCE: 61 FR 20713, May 8, 1996, unless otherwise noted.

GRADES

§51.1810 U.S. Fancy.

''U.S. Fancy'' consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See §51.1828.);

(2) Firm;

(3) Highly colored;

(4) Mature; and,

(5) Well formed.

(b) Free from:

(1) Caked melanose;

(2) Decay;

(3) Unhealed skin breaks; and,

(4) Wormy fruit.

(c) Free from damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Creasing;

(5) Dirt or other foreign material;

(6) Dryness or mushy condition;

(7) Disease;

(8) Green spots;

(9) Hail;

(10) Insects;

(11) Oil spots;

(12) Scab;

(13) Scale;

(14) Scars;

(15) Skin breakdown;

(16) Sprayburn;

(17) Sunburn; and,

(18) Other means.

(d) For tolerances see §51.1820.

§51.1811 U.S. No. 1 Bright.

The requirements for this grade are the same as for U.S. No. 1 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration. For tolerances see §51.1820.

§ 51.1812 U.S. No. 1.

''U.S. No. 1'' consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.1828.);

(2) Fairly well colored;

(3) Firm;

(4) Mature; and,

(5) Well formed.

(b) Free from:

(1) Decay;

(2) Unhealed skin breaks; and,

(3) Wormy fruit.

(c) Free from damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Dirt or other foreign material;

(7) Disease;

(8) Dryness or mushy condition;

(9) Green spots;

(10) Hail;

(11) Insects;

(12) Oil spots;

(13) Scab;

(14) Scale;

(15) Scars;

(16) Skin breakdown;

(17) Sprayburn;

(18) Sunburn; and

(19) Other means.

(d) For tolerances see § 51.1820.

§ 51.1813 U.S. No. 1 Golden.

The requirements for this grade are the same as for U.S. No. 1 except that not more than 30 percent, by count, of the fruit shall have than more one-third of their surface, in the aggregate, affected by discoloration. For tolerances see § 51.1820.

§ 51.1814 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on each fruit shall be of rust mite type. For tolerances see § 51.1820.

§ 51.1815 U.S. No. 1 Russet.

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration. For tolerances see § 51.1820.

§ 51.1816 U.S. No. 2 Bright.

The requirements for this grade are the same as for U.S. No. 2 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration. For tolerances see § 51.1820.

§ 51.1817 U.S. No. 2.

''U.S. No. 2'' consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See § 51.1828.);

(2) Fairly firm;

(3) Fairly well formed;

(4) Mature; and

(5) Reasonably well colored.

(b) Free from:

(1) Decay;

(2) Unhealed skin breaks; and,

(3) Wormy fruit.

(c) Free from serious damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Dirt or other foreign material;

(7) Disease;

(8) Dryness or mushy condition;

(9) Green spots;

(10) Hail;

(11) Insects;

(12) Oil spots;

(13) Scab;

(14) Scale;

(15) Scars;

(16) Skin breakdown;

(17) Sprayburn;

(18) Sunburn; and

(19) Other means.

(d) For tolerances see § 51.1820.

§ 51.1818 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that at least 10 percent of the fruit shall have more than one-half of their surface, in the aggregate, affected by any type of discoloration. For tolerances see § 51.1820.

§ 51.1819 U.S. No. 3.

''U.S. No. 3'' consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Mature;

(2) Not flabby; and

(3) Not seriously lumpy.

(b) Free from:

(1) Decay;

(2) Unhealed skin breaks; and

(3) Wormy fruit.

(c) Free from very serious damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Caked melanose;

(4) Creasing;

(5) Dirt or other foreign material;

(6) Disease;

(7) Dryness or mushy condition;

(8) Hail;

(9) Insects;

(10) Scab;

(11) Scale;

(12) Scars;

(13) Skin breakdown;

(14) Sprayburn;

(15) Sunburn; and,

(16) Other means.

(d) For tolerances see § 51.1820.

TOLERANCES

§ 51.1820 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, based on a minimum 25 count sample, are provided as specified:

(a) *Defects.*

(1) U.S. Fancy, U.S. No. 1 Bright, U.S. No. 1, U.S. No. 1 Golden, U.S. No. 1 Bronze, U.S. No. 1 Russet, U.S. No. 2 Bright, U.S. No. 2, and U.S. No. 2 Russet grades.

(i) *For defects at shipping point.*[1] Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the specified grade: *Provided,* that included in this amount not more than 5 percent shall be allowed for defects causing very serious damage, including in this latter amount not more than 1 percent for decay or wormy fruit.

(ii) *For defects en route or at destination.* Not more than 12 percent of the fruit which fail to meet the requirements of the specified grade: *Provided,* that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

(B) 7 percent for defects causing very serious damage, including therein not more than 5 percent for very serious damage by permanent defects and not more than 3 percent for decay or wormy fruit.

(2) U.S. No. 3.

(i) *For defects at shipping point.*[1] *Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the grade: Provided,* that included in this amount not more than 1 percent shall be for decay or wormy fruit.

(ii) *For defects en route or at destination.* Not more than 12 percent of the fruit which fail to meet the requirements of the grade: *Provided,* that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

(B) 3 percent for decay or wormy fruit.

(b) *Discoloration.*—(1) *U.S. No. 1 Bright, U.S. No. 1, U.S. No. 2 Bright, and U.S. No. 2.* Not more than 10 percent of the fruit in any lot may fail to meet the requirements relating to discoloration as specified in each grade. No sample may have more than 20 percent of the fruit with excessive discoloration: *And provided further,* that the entire lot

[1] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

averages within the percentage specified.

(2) *U.S. No. 1 Golden.* Not more than 30 percent of the fruit shall have in excess of one-third of their surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to increase this percentage. No sample may have more than 40 percent of the fruit with excessive discoloration: *And provided further,* that the entire lot averages within the percentage specified.

(3) *U.S. No. 1 Bronze, and U.S. No. 1 Russet.* At least 30 percent of the fruit shall have in excess of one-third of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage. No sample may have less than 20 percent of the fruit with required discoloration: *And provided further,* that the entire lot averages within the percentage specified.

(4) *U.S. No. 2 Russet.* At least 10 percent of the fruit shall have in excess of one-half of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage: *And provided further,* that the entire lot averages within the percentage specified.

[61 FR 20713, May 8, 1996, as amended at 61 FR 40290, Aug. 2, 1996]

APPLICATION OF TOLERANCES

§ 51.1821 Application of tolerances.

Individual samples are subject to the following limitations, unless otherwise specified in § 51.1820. Individual samples shall have not more than one and one-half times a specified tolerance of 10 percent or more, and not more than double a specified tolerance of less than 10 percent: *Provided,* that at least one decayed or wormy fruit may be permitted in any sample: And provided further, that the averages for the entire lot are within the tolerances specified for the grade.

[61 FR 40290, Aug. 2, 1996]

SIZE

§ 51.1822 Size.

(a) Fruits shall be fairly uniform in size and shall be packed in containers according to approved and recognized methods.

(b) ''Fairly uniform in size'' means that not more than 10 percent of the tangerines per sample may vary more than one-half inch in diameter.

(c) In order to allow for variations incident to proper sizing, not more than 10 percent of the samples in any lot may fail to meet the requirements of size.

DEFINITIONS

§ 51.1823 Mature.

Mature shall have the same meaning assigned the term in the Florida Citrus Code, Chapter 601, 1995 Edition, and the Official Rules Affecting the Florida Citrus Industry, in effect as of February 12, 1995. These tangerine maturity requirements are contained in the Florida Citrus Code, Chapter 601, Florida Statutes, Sections 601.21, and 601.22, 1995 Edition, and the State of Florida Department of Citrus Official Rules Affecting the Florida Citrus Industry, Part 1, Chapter 20–13 Market Classification, Maturity Standards and Processing or Packing Restrictions for Hybrids in effect as of February 12, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from, Florida Department of Citrus, Post Office Box 148, Lakeland, Florida 33802 or copies of both regulations may be inspected at USDA, AMS, F&VD, FPB, Standardization Section, Room 2065–S, 14th and Independence Ave., Washington, DC 20250 or at the Office of the Federal Register, Suite 700, 800 North Capitol Street, Washington, DC.

§ 51.1824 Firm.

Firm means that the flesh is not soft and the fruit is not badly puffy and that the skin has not become materially separated from the flesh of the tangerine.

§ 51.1825 Well formed.

Well formed means that the fruit has the characteristic tangerine shape and is not deformed.

§51.1826 Damage.

Damage means any specific defect described in §51.1837, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§51.1827 Highly colored.

Highly colored means that the ground color of each fruit is a deep tangerine color, or characteristic color for the variety, with practically no trace of yellow color.

§51.1828 Discoloration.

Discoloration means russeting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by smooth or fairly smooth superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed in the grade.

§51.1829 Well colored.

Well colored means that a good yellow or better ground color predominates over the green color on the entire fruit surface with no distinct green color present, and that some portion of the surface has a reddish tangerine blush, or characteristic color for the variety.

§51.1830 Fairly well colored.

Fairly well colored means that the surface of the fruit may have green color which does not exceed the aggregate area of a circle 1–¼ inches (31.8 mm) in diameter and that the remainder of the surface has a yellow or better ground color with some portion of the surface showing reddish tangerine blush, or characteristic color for the variety.

§51.1831 Fairly firm.

Fairly firm means that the flesh may be slightly soft but is not bruised or badly puffy, and that the skin has not become seriously separated from the flesh of the tangerine.

§51.1832 Fairly well formed.

Fairly well formed means that the fruit may not have the shape characteristic of the variety but that it is not badly deformed.

§51.1833 Serious damage.

Serious damage means any specific defect described in §51.1837, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§51.1834 Reasonably well colored.

Reasonably well colored means that a good yellow or reddish tangerine color shall predominate over the green color on at least one-half of the fruit surface in the aggregate, and that each fruit shall show practically no lemon color.

§51.1835 Very serious damage.

Very serious damage means any specific defect described in §51.1837, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§51.1836 Diameter.

Diameter means the greatest dimension measured at right angles to a line from stem to blossom end.

§ 51.1837 Classification of defects.

TABLE I

Factor	Damage	Serious damage	Very serious damage
Ammoniation	Not occurring as light speck type, or detracts more than discoloration permitted in the grade.	Scars are cracked or dark and aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Bruises	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Fruit is split open, peel is badly watersoaked, or rag is ruptured and juice sacs are ruptured causing a mushy condition affecting all segments more than ½ inch (12.7 mm) at bruised area or the equivalent of this amount, by volume, when affecting more than one area on the fruit.
Buckskin	Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose	Aggregating more than a circle ⅜ inch (9.5 mm) in diameter.	Aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Creasing	Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.
Dryness or mushy condition	Affecting all segments more than ⅛ inch (3.2 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ¼ inch (6.4 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than ½ inch (12.7 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots	Aggregating more than a circle ½ inch (12.7 mm) in diameter.	Aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Oil spots	Aggregating more than a circle ½ inch (12.7 mm) in diameter.	Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scab	Materially detracts from the shape or texture, or aggregating more than a circle ⅜ inch (9.5 mm) in diameter.	Seriously detracts from the shape or texture, or aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scale	Aggregating more than a circle ⅜ inch (9.5 mm) in diameter.	Aggregating more than a circle ⅝ inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scars, Hail, and Thorn scratches [For smooth or fairly smooth superficial scars see § 51.1828.].	Deep or rough aggregating more than a circle ¼ inch (6.4 mm) in diameter; slightly rough with slight depth aggregating more than a circle ¾ inch (19.1 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than a circle 1⅛ inches (28.6 mm) in diameter.	Deep or rough aggregating more than a circle ½ inch (12.7 mm) in diameter; slightly rough with slight depth aggregating more than a circle 1⅛ inches (28.6 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than 10 percent of fruit surface.	Deep or rough or unsightly that appearance is very seriously affected.
Skin breakdown	Aggregating more than a circle ½ inch (12.7 mm) in diameter.	Aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sprayburn	Skin is hard and aggregating more than a circle ¾ inch (19.1 mm) in diameter.	Skin is hard and aggregating more than a circle 1¼ inches (31.8 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sunburn	Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.

Note: All references to area or aggregate area, or length are based on a tangerine 2½ inches in diameter (63.5 mm), allowing proportionately greater areas on larger fruit and lesser areas on smaller fruit.

Subpart—United States Standards for Fresh Tomatoes[1]

SOURCE: 38 FR 23932, Sept. 5, 1973, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§51.1855 U.S. No. 1.

''U.S. No. 1'' consists of tomatoes which meet the following requirements:

(a) Basic requirements:
(1) Similar varietal characteristics;
(2) Mature;
(3) Not overripe or soft;
(4) Clean;
(5) Well developed;
(6) Fairly well formed; and,
(7) Fairly smooth.
(b) Free from:
(1) Decay;
(2) Freezing injury; and
(3) Sunscald.
(c) Not damaged by any other cause.
(d) For tolerances see §51.1861.

§51.1856 U.S. Combination.

''U.S. Combination'' consists of a combination of U.S. No. 1 and U.S. No. 2 tomatoes: *Provided,* That at least 60 percent, by count, meet the requirements of U.S. No. 1 grade.

(a) For tolerances see §51.1861.

§51.1857 U.S. No. 2.

''U.S. No. 2'' consists of tomatoes which meet the following requirements:

(a) Basic requirements:
(1) Similar varietal characteristics;
(2) Mature;
(3) Not overripe or soft;
(4) Clean;
(5) Well developed;
(6) Reasonably well formed; and,
(7) Not more than slightly rough.
(b) Free from:
(1) Decay;
(2) Freezing injury; and,
(3) Sunscald.
(c) Not seriously damaged by any other cause.
(d) For tolerances see §51.1861.

§51.1858 U.S. No. 3.

''U.S. No. 3'' consists of tomatoes which meet the following requirements:

(a) Basic requirements:
(1) Similar varietal characteristics;
(2) Mature;
(3) Not overripe or soft;
(4) Clean;
(5) Well developed; and,
(6) May be mishapen.
(b) Free from:
(1) Decay; and,
(2) Freezing injury.
(c) Not seriously damaged by:
(1) Sunscald.
(d) Not very seriously damaged by any other cause.
(e) For tolerances see §51.1861.

SIZE

§51.1859 Size.

(a) The size of tomatoes packed in any standard type shipping container shall be specified and marked according to one of the size designations set forth in Table I. Individual containers shall not be marked with more than one size designation. Consumer packages and their master container are exempt; however, if they are marked, the same requirements would apply.

(1) When containers are marked in accordance with Table I, the markings on at least 85 percent of the containers in a lot must be legible.

(2) In determining compliance with the size designations, the measurement for minimum diameter shall be the largest diameter of the tomato measured at right angles to a line from the stem end to the blossom end. The measurement for maximum diameter shall be the smallest dimension of the tomato determined by passing the tomato through a round opening in any position.

(b) In lieu of marking containers in accordance with paragraph (a) of this section or specifying size in accordance with the dimensions defined in Table I, for Cerasiforme type tomatoes commonly referred to as cherry tomatoes

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

and Pyriforme type tomatoes commonly referred to as pear shaped tomatoes, and other similar types, size may be specified in terms of minimum diameter or minimum and maximum diameter expressed in whole inches, and not less than thirty-second inch fractions thereof, or millimeters in accordance with the facts.

(1) Tomatoes of these types are exempt from marking requirements. However, when marked to a minimum or minimum and maximum diameter, the markings on at least 85 percent of the containers in a lot must be legible.

(c) For tolerances see § 51.1861.

TABLE I

Size designation	Inches	
	Minimum diameter [1]	Maximum diameter [2]
Small	2 4/32	2 9/32
Medium	2 9/32	2 17/32
Large	2 16/32	2 25/32
Extra large	2 24/32	

[1] Will not pass through a round opening of the designated diameter when tomato is placed with the greatest transverse diameter across the opening.

[2] Will pass through a round opening of the designated diameter in any position.

[56 FR 21915, May 13, 1991; 56 FR 32474, July 16, 1991]

COLOR CLASSIFICATION

§ 51.1860 Color classification.

(a) The following terms may be used, when specified in connection with the grade statement, in describing the color as an indication of the stage of ripeness of any lot of mature tomatoes of a red fleshed variety:

(1) *Green.* ''Green'' means that the surface of the tomato is completely green in color. The shade of green color may vary from light to dark;

(2) *Breakers.* ''Breakers'' means that there is a definite break in color from green to tannish-yellow, pink or red on not more than 10 percent of the surface;

(3) *Turning.* ''Turning'' means that more than 10 percent but not more than 30 percent of the surface, in the aggregate, shows a definite change in color from green to tannish-yellow, pink, red, or a combination thereof;

(4) *Pink.* ''Pink'' means that more than 30 percent but not more than 60 percent of the surface, in the aggregate, shows pink or red color;

(5) *Light red.* ''Light red'' means that more than 60 percent of the surface, in the aggregate, shows pinkish-red or red: *Provided,* That not more than 90 percent of the surface is red color; and,

(6) *Red.* ''Red'' means that more than 90 percent of the surface, in the aggregate, shows red color.

(b) Any lot of tomatoes which does not meet the requirements of any of the above color designations may be designated as ''Mixed Color''.

(c) For tolerances see § 51.1861.

(d) Tomato color standards U.S.D.A. Visual Aid TM—L—1 consists of a chart containing twelve color photographs illustrating the color classification requirements, as set forth in this section. This visual aid may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such Service. Duplicates of this visual aid may be purchased from The John Henry Co., Post Office Box 1410, Lansing, Michigan 48904.

[38 FR 23932, Sept. 5, 1973, as amended at 40 FR 2791, Jan. 16, 1975. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

TOLERANCES

§ 51.1861 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

(a) *U.S. No. 1*—(1) *For defects at shipping point.*[2] Ten percent for tomatoes in any lot which fail to meet the requirements for this grade: *Provided,* That not more than one-half of this tolerance, or 5 percent, shall be allowed

[2] Shipping point, as used in these standards, means the point of origin of the shipment in producing area or at port of loading for ship stores or overseas shipment, or in the case of shipments from outside the continental United States, the port of entry into the United States.

for defects causing very serious damage, including therein not more than 1 percent for tomatoes which are soft or affected by decay; and,

(2) *For defects en route or at destination.* Fifteen percent for tomatoes in any lot which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) Five percent for tomatoes which are soft or affected by decay;

(ii) Ten percent for tomatoes which are damaged by shoulder bruises or by discolored or sunken scars on any parts of the tomatoes; and,

(iii) Ten percent for tomatoes which are otherwise defective: *And provided further,* That not more than 5 percent shall be allowed for tomatoes which are very seriously damaged by any cause, exclusive of soft or decayed tomatoes.

(b) *U.S. Combination*—(1) *For defects at shipping point.*[2] Ten percent for tomatoes in any lot which fail to meet the requirements of the U.S. No. 2 grade: *Provided,* That not more than one-half of this tolerance, or 5 percent, shall be allowed for defects causing very serious damage, including 1 percent for tomatoes which are soft or affected by decay; and,

(2) *For defects en route or at destination.* Fifteen percent for tomatoes in any lot which fail to meet the requirements of the U.S. No. 2 grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) Five percent for tomatoes which are soft or affected by decay;

(ii) Ten percent for tomatoes which are seriously damaged by shoulder bruises or by discolored or sunken scars on any parts of the tomatoes; and,

(iii) Ten percent for tomatoes which are otherwise defective: *And provided further,* That not more than 5 percent shall be allowed for tomatoes which are very seriously damaged by any cause, exclusive of soft or decayed tomatoes.

(c) *U.S. No. 2*—(1) *For defects at shipping point.*[2] Ten percent for tomatoes in any lot which fail to meet the requirements of this grade: *Provided,* That not more than one-half of this tolerance, or 5 percent, shall be allowed for defects causing very serious damage, including therein not more than 1 percent for tomatoes which are soft or affected by decay; and,

(2) *For defects en route or at destination.* Fifteen percent for tomatoes in any lot which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) Five percent for tomatoes which are soft or affected by decay;

(ii) Ten percent for tomatoes which are seriously damaged by shoulder bruises or by discolored or sunken scars on any parts of the tomatoes; and,

(iii) Ten percent for tomatoes which are otherwise defective: *And provided further,* That not more than 5 percent shall be allowed for tomatoes which are very seriously damaged by any cause, exclusive of soft or decayed tomatoes.

(d) *U.S. No. 3*—(1) *For defects at shipping point.*[2] Ten percent for tomatoes in any lot which fail to meet the requirements of this grade: *Provided,* That not more than one-half of this tolerance, or 5 percent, shall be allowed for tomatoes which are very seriously damaged by insects and not more than one-tenth of the tolerance, or 1 percent, for tomatoes which are soft or affected by decay; and,

(2) *For defects en route or at destination.* Fifteen percent for tomatoes in any lot which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) Five percent for tomatoes which are soft or affected by decay;

(ii) Ten percent for tomatoes which are very seriously damaged by shoulder bruises or by discolored or sunken scars on any parts of the tomatoes; and,

(iii) Ten percent for tomatoes which are otherwise defective: *And provided further,* That not more than 5 percent shall be allowed for tomatoes which are very seriously damaged by insects.

(e) *For off size.* Ten percent for tomatoes in any lot which are smaller than the specified minimum diameter, or larger than the specified maximum diameter.

(f) *For off color.* Ten percent for tomatoes in any lot which fail to meet the color specified, including therein not more than 5 percent for tomatoes which are green in color, when any term other than ''Green'' is specified.

APPLICATION OF TOLERANCES

§ 51.1862 Application of tolerances.

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

(a) For packages which contain more than 5 pounds (2.27 kg), and a tolerance of 10 percent or more is provided, individual packages shall have not more than 1½ times the tolerance specified, and for a tolerance of less than 10 percent individual packages shall have not more than double the tolerance specified, except that at least one defective and one off size specimen may be allowed in any package: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade; and,

(b) For packages which contain 5 pounds (2.27 kg) or less individual packages shall have not more than 4 times the tolerance specified, except that at least one tomato which is soft, or affected by decay, and one off-size specimen may be permitted in any package: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade.

STANDARD WEIGHT

§ 51.1863 Standard weight.

(a) When packages are marked to a net weight of 15 pounds (6.80 kg) or more, the net weight of the contents shall not be less than the designated net weight and shall not exceed the designated weight by more than 2 pounds (0.91 kg).

(b) In order to allow for variations incident to proper sizing, not more than 15 percent, by count, of the packages in any lot may fail to meet the requirements for standard weight.

DEFINITIONS

§ 51.1864 Similar varietal characteristics.

Similar varietal characteristics means that the tomatoes are alike as to firmness of flesh and shade of color (for example, soft-fleshed, early maturing varieties are not mixed with firm-fleshed, midseason or late varieties, or bright red varieties mixed with varieties having a purplish tinge).

§ 51.1865 Mature.

Mature means that the tomato has reached the stage of development which will insure a proper completion of the ripening process, and that the contents of two or more seed cavities have developed a jelly-like consistency and the seeds are well developed.

§ 51.1866 Soft.

Soft means that the tomato yields readily to slight pressure.

§ 51.1867 Clean.

Clean means that the tomato is practically free from dirt or other foreign material.

§ 51.1868 Well developed.

Well developed means that the tomatoe shows normal growth. Tomatoes which are ridged and peaked at the stem end, contain dry tissue, and usually contain open spaces below the level of the stem scar, are not considered well developed.

§ 51.1869 Fairly well formed.

Fairly well formed means that the tomato is not more than moderately kidney-shaped, lop-sided, elongated, angular, or otherwise moderately deformed.

§ 51.1870 Fairly smooth.

Fairly smooth means that the tomato is not conspicuously ridged or rough.

§ 51.1871 Damage.

Damage means any specific defect described in § 51.1877, table II; or an equally objectionable variation of any one of these defects, any other defect, or any

combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the tomato.

§ 51.1872 Reasonably well formed.

Reasonably well formed means that the tomato is not decidedly kidney-shaped, lop-sided, elongated, angular, or otherwise decidedly deformed.

§ 51.1873 Slightly rough.

Slightly rough means that the tomato is not decidedly ridged or grooved.

§ 51.1874 Serious damage.

Serious damage means any specific defect described in § 51.1877, table II; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the tomato.

§ 51.1875 Misshapen.

Misshapen means that the tomato is decidedly kidney-shaped, lop-sided, elongated, angular or otherwise decidedly deformed: *Provided,* That the shape is not affected to an extent that the appearance or the edible quality of the tomato is very seriously affected.

§ 51.1876 Very serious damage.

Very serious damage means any specific defect described in § 51.1877, Table II; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the tomato.

§ 51.1877 Classification of defects.

TABLE II

REFERENCES TO AREA, AGGREGATE AREA, LENGTH OR AGGREGATE LENGTH ARE BASED ON A TOMATO HAVING A DIAMETER OF 2½ INCHES (64 MM)[1]

[See footnote at end of Table II]

Factor	Damage	Serious damage	Very serious damage
Cuts and broken skins	Not shallow or not well healed, or shallow, well healed cut more than ½ inch (13 mm) in length, or other shallow, well healed skin breaks aggregating more than a circle ⅜ inch (10 mm) in diameter.	Not shallow or not well healed, or shallow, well healed cut more than ½ inch (13 mm) in length, or other shallow, well healed skin breaks aggregating more than a circle ½ inch (13 mm) in diameter.	Fresh or healed and extending through the tomato wall.
Puffiness	Open space in 1 or more locules materially detracts from appearance of tomato cut through center at right angles to a line from stem to blossom end.	Open space in 1 or more locules seriously detracts from appearance of tomato cut through center at right angles to a line from stem to blossom end.	Open space in 2 or more locules very seriously detracts from appearance of tomato cut through center at right angles to a line from stem to blossom end.
Catfaces	Scars are rough or deep, channels are very deep or wide, channels extend into a locule, or a fairly smooth catface aggregating more than a circle ½ inch (13 mm) in diameter.	Scars are rough or deep, channels are very deep or wide, channels extend into a locule, or a fairly smooth catface aggregating more than a circle ¾ inch (19 mm) in diameter.	Channels extend into the locule, wall has been weakened to the extent that slight pressure will cause a tomato to leak, or a fairly smooth catface aggregating more than a circle 1 inch (25 mm) in diameter.
Scars (other than catfaces).	No depth and aggregating more than a circle ⅜ inch (10 mm) in diameter.	No depth and aggregating more than a circle ⅝ inch (16 mm) in diameter.	No depth and aggregating more than a circle 1 inch (25 mm) in diameter.

TABLE II—Continued

REFERENCES TO AREA, AGGREGATE AREA, LENGTH OR AGGREGATE LENGTH ARE BASED ON A TOMATO HAVING A DIAMETER OF 2½ INCHES (64 MM)[1]

[See footnote at end of Table II]

Factor	Damage	Serious damage	Very serious damage
Growth cracks (radiating from or concentric to stem scar).	Not well healed, more than ⅛ inch (3 mm) in depth, individual radial cracks more than ½ inch (13 mm) in length, aggregate length of all radial cracks more than 1 inch (25 mm) measured from edge of stem scar. Any lot of tomatoes which are at least turning may have cracks which are not well healed provided they are not leaking.	Not well healed, more than ⅛ inch (3 mm) in depth, individual radial cracks more than ¾ inch (19 mm) in length, aggregate length of all radial cracks more than 1¾ inches (44 mm) measured from edge of stem scar. Any lot of tomatoes which are at least turning may have cracks which are not well healed provided they are not leaking.	Not well healed, more than ¼ inch (6 mm) in depth, individual radial cracks more than 1 inch (25 mm) in length, aggregate length of all radial cracks more than 2⅞ inches (73 mm) measured from edge of stem scar. Any lot of tomatoes which are at least turning may have cracks which are not well healed provided they are not leaking, not more than ⅛ inch (3 mm) in depth, individual radial cracks are not more than ¾ inch (19 mm) in length.
Hail	Deep, rough, not well healed and corked over, or fairly smooth, shallow hailmarks aggregating more than a circle ⅜ inch (10 mm) in diameter.	Deep, rough, not well healed and corked over, or fairly smooth, shallow hailmarks aggregating more than a circle ⅝ inch (16 mm) in diameter.	Fresh, very deep or fairly smooth, shallow hailmarks aggregating more than a circle 1 inch (25 mm) in diameter.
Insect injury	Materially detracts from the appearance of any insect is present in the fruit.	Seriously detracts from the appearance of any insect is present in the fruit.	Very seriously detracts from the appearance of any insect is present in the fruit.

[1]Conversion to metric equivalent, made to nearest whole millimeter.

[38 FR 23932, Sept. 5, 1973, as amended at 38 FR 32920, Nov. 29, 1973. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

Subpart—United States Consumer Standards for Fresh Tomatoes

SOURCE: 18 FR 7144, Nov. 11, 1953, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.1900 General.

These standards apply only to fieldgrown tomatoes and not to tomatoes grown in greenhouses.

GRADES

§ 51.1901 U.S. Grade A.

U.S. Grade A shall consist of tomatoes of similar varietal characteristics which are mature and are at least turning (see § 51.1904), but are not overripe or soft which are well developed, at least fairly well formed, fairly smooth, free from soft rot, freezing injury, and from damage caused by dirt, bruises, cuts, shriveling, sunscald, sunburn, puffiness, catfaces, growth cracks, scars, dry rot, other diseases, insects, hail, or mechanical or other means. Tomatoes on the shown face shall be reasonably representative in size and quality of the contents of the container. (See § 51.1903.)

(a) Incident to proper grading and handling, except for maturity, not more than 5 percent, by count, of the tomatoes in any lot may fail to meet the requirements of the grade, including not more than 1 percent for tomatoes which are affected by soft rot.

§ 51.1902 U.S. Grade B.

U.S. Grade B shall consist of tomatoes of similar varietal characteristics which are mature and are at least turning (see § 51.1904), but are not overripe or soft and not badly misshapen; which are free from soft rot, freezing injury and from serious damage caused by dirt, bruises, cuts, shriveling, sunscald, sunburn, puffiness, catfaces, growth cracks, scars, dry rot, other diseases, insects hail, or mechanical or other means Tomatoes on the shown face shall be reasonably representative in size and quality of the contents of the container. (See § 51.1903.)

(a) Incident to proper grading and handling, except for maturity, not more than 5 percent, by count, of the tomatoes in any lot may fail to meet the requirements of the grade, including not more than 1 percent for tomatoes which are affected by soft rot.

SIZE AND MATURITY CLASSIFICATION

§ 51.1903 Size classification.

The following terms may be used for describing the size of the tomatoes in any lot:

Small	*Medium*
Under 3 oz	3 to 6 oz., inc.
Large	*Very Large*
Over 6 to 10 oz., inc	Over 10 oz.

(a) The tomatoes may also be classed in terms of combinations of the above sizes, as ''Small to Medium,'' ''Medium to Large,'' ''Small to Very Large,'' etc., in accordance with the facts.

(b) Incident to proper sizing, not more than 10 percent, by count, of the tomatoes in any lot may vary from the size specified.

§ 51.1904 Maturity classification.

Tomatoes which are characteristically red when ripe, but are not overripe or soft, may be classified for maturity as follows:

(a) Turning, when at least some part of the surface of the tomato, but less than one-half of the surface in the aggregate, is covered with pink color.

(b) Pink, when the tomato shows from one-half to three-fourths of the surface in the aggregate covered with pink or red color.

(c) Hard ripe, when the tomato shows three-fourths or more of the surface in the aggregate covered with pink or red color.

(d) Firm ripe, when the tomato shows three-fourths or more of the surface in the aggregate covered with red color characteristic of reasonably well ripened tomatoes.

(e) Incident to proper maturity determination, not more than a total of 10 percent, by count, of the tomatoes in any lot may fail to meet the maturity specified: *Provided*, That not more than 5 percent shall be allowed for tomatoes which are immature or are overripe or soft.

OFF-GRADE

§ 51.1905 Off-Grade tomatoes.

Tomatoes which fail to meet the requirements of either of the foregoing grades shall be Off-Grade tomatoes.

DEFINITIONS

§ 51.1906 Similar varietal characteristics.

Similar varietal characteristics means that the tomatoes are alike as to color, i.e., bright red varieties shall not be mixed with varieties which have a purplish tinge.

§ 51.1907 Mature.

Mature means that the tomato has reached the stage of development which will insure a proper completion of the ripening process.

§ 51.1908 Well developed.

Well developed means that the tomato shows normal growth. Tomatoes which are ridged and peaked at the stem end, contain dry tissue and usually open spaces, are not considered well developed.

§ 51.1909 Fairly well formed.

Fairly well formed means that the tomato is not decidedly kidney-shaped, lopsided, elongated, angular, or otherwise deformed.

§ 51.1910 Fairly smooth.

Fairly smooth means that the tomato is not conspicuously ridged or rough.

§ 51.1911 Damaged.

Damaged means any defect which materially affects the appearance, or edible, shipping or keeping quality of the tomatoes. Any one of the following defects or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Cuts which are not shallow, not well healed, or when more than ½ inch in length.

(b) Puffiness if the open space in one or more locules materially affects the appearance when the tomato is cut

through the center at right angles to a line running from the stem to the blossom end.

(c) *Catfaces.* These are irregular, dark, leathery scars at the blossom end of the fruit. Such scars damage the tomato when they are rough or deep, or when channels extend into the locule, or when they are fairly smooth and greater in area than a circle ⅜ inch in diameter on a 2½ inch tomato. Smaller tomatoes shall have lesser areas of fairly smooth catfaces and larger tomatoes may have greater areas, provided that such catfaces do not affect the appearance of the tomatoes to a greater extent than that caused by fairly smooth catfaces which are permitted on a 2½ inch tomato.

(d) *Growth cracks.* These are ruptures or cracks radiating from the stem scar, or concentric to the stem scar. They damage the tomato when not well healed, or when more than ½ inch in length measured from the margin of the stem scar; except that very narrow, well healed cracks concentric to the stem scar shall not be considered as damage unless they are so numerous as to damage the appearance of the fruit.

(e) Scars (except catfaces), when dark colored and shallow and aggregating more than ¼ inch in diameter on a tomato 2½ inches in diameter, or lighter colored shallow scars covering a greater area when they detract from the appearance to a greater extent than a dark-colored, shallow scar ¼ inch in diameter. Smaller tomatoes shall have lesser areas of scars and larger tomatoes may have greater areas: *Provided,* That such scars do not affect the appearance of the tomatoes to a greater extent than that caused by scars which are permitted on a 2½-inch tomato. A scar which penetrates the wall of the tomato shall be considered as damage.

(f) Dry rot such as dry type Macrosporium or Phoma, when the spot is not adjacent to the stem scar, or when adjacent to the stem scar and more than 3/16 inch in diameter.

§ 51.1912 Badly misshapen.

Badly misshapen means that the tomato is so badly deformed that its appearance is seriously affected.

§ 51.1913 Serious damage.

Serious damage means any defect which seriously affects the appearance, or edible, shipping, or keeping quality of the tomatoes. Any one of the following defects or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(a) Soft ripe tomatoes or tomatoes affected by the soft rot.

(b) Fresh holes or cuts, or any holes or cuts through the tomato wall, or healed cuts which seriously affect the appearance of the tomato.

(c) Tomatoes showing any effects of freezing.

(d) Puffiness which causes the tomato to be distinctly light in weight.

(e) Growth cracks, when not well healed, or when so extensive, deep or discolored that the appearance of the tomato is seriously affected.

(f) Scars (except catfaces), when dark colored and shallow and aggregating more than ½ inch in diameter on a tomato 2½ inches in diameter, or lighter colored, shallow scars covering a greater area when they detract from the appearance to a greater extent than a darkcolored, shallow scar ½ inch in diameter. Smaller tomatoes shall have lesser areas of scars and larger tomatoes may have greater areas: *Provided,* That such scars do not affect the appearance of the tomatoes to a greater extent than that caused by scars which are permitted on a 2½-inch tomato.

(g) Dry rot such as dry type Macrosporium or Phoma, when the spot is not adjacent to the stem scar, or when adjacent to the stem scar and more than ¼ inch in diameter.

(h) Fruit actually infested with worms.

Subpart—United States Standards for Grades of Filberts in the Shell[1]

SOURCE: 35 FR 11453, July 17, 1970, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act or with other applicable State laws and regulations.

GRADE

§ 51.1995 U.S. No. 1.

''U.S. No. 1'' consists of filberts in the shell which meet the following requirements:

(a) Similar type; and,

(b) Dry.

(c) Shells:

(1) Well formed; and,

(2) Clean and bright.

(3) Free from:

(i) Blanks; and,

(ii) Broken or split shells.

(4) Free from damage caused by:

(i) Stains; and,

(ii) Adhering husk; or,

(iii) Other means.

(d) Kernels:

(1) Reasonably well developed; and,

(2) Not badly misshapen.

(3) Free from:

(i) Rancidity;

(ii) Decay;

(iii) Mold; and,

(iv) Insect injury.

(4) Free from damage caused by:

(i) Shriveling; and,

(ii) Discoloration; or,

(iii) Other means.

(e) Size: The size shall be specified in connection with the grade in terms of minimum diameter, minimum and maximum diameters, or in accordance with one of the size classifications in Table I.

TABLE I

Size classifications	Maximum size—Will pass through a round opening of the following size	Minimum size—Will not pass through a round opening of the following size
Round type varieties:		
Jumbo	No maximum	56/64 inch.
Large	56/64 inch	49/64 inch.
Medium	49/64 inch	45/64 inch.
Small	45/64 inch	No minimum.
Long type varieties:		
Jumbo	No maximum	47/64 inch.
Large	48/64 inch	44/64 inch.
Medium	45/64 inch	34/64 inch.
Small	35/64 inch.	No minimum.

(f) Tolerances: In order to allow for variations incident to proper grading and handling, the following tolerances, by count, are permitted as specified:

(1) *For mixed types.* 20 percent for filberts which are of a different type.

(2) *For defects.* 10 percent for filberts which are below the requirements of this grade: *Provided,* That not more than one-half of this amount or 5 percent shall consist of blanks, and not more than 5 percent shall consist of filberts with rancid, decayed, moldy or insect injured kernels, including not more than 3 percent for insect injury.

(3) *For off-size.* 15 percent for filberts which fail to meet the requirements for thesize specified, but not more than two-thirds of this amount, or 10 percent shall consist of undersize filberts.

APPLICATION OF STANDARDS

§ 51.1996 Application of standards.

(a) The grade of a lot of filberts shall be determined on the basis of a composite sample drawn from containers in various locations in the lot. However, any container or group of cantainers in which the filberts are obviously of a quality, type or size materially different from that in the majority of containers shall be considered a separate lot, and shall be sampled separately.

(b) In grading the sample, each filbert shall be examined for defects of the shell before being cracked for kernel examination. A filbert shall be classed as only one defective nut even though it may be defective externally and internally.

DEFINITIONS

§ 51.1997 Similar type.

Similar type means that the filberts in each container are of the same general type and appearance. For example, nuts of the round type shall not be mixed with those of the long type in the same container.

§ 51.1998 Dry.

Dry means that the shell is free from surface moisture, and that the shells and kernels combined do not contain more than 10 percent moisture.

§ 51.1999 Well formed.

Well formed means that the filbert shell is not materially misshapen.

§ 51.2000 Clean and bright.

Clean and bright means that the individual filbert and the lot as a whole are practically free from adhering dirt and other foreign material, and that the shells have characteristic color.

§ 51.2001 Blank.

Blank means a filbert containing no kernel or a kernel filling less than one-fourth the capacity of the shell.

§ 51.2002 Split shell.

Split shell means a shell having any crack which is open and conspicuous for a distance of more than one-fourth the circumference of the shell, measured in the direction of the crack.

§ 51.2003 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which materially detracts from the appearance, or the edible or marketing quality of the filberts. The following specific defects shall be considered as damage:

(a) Stains which are dark and materially affect the appearance of the individual shell.

(b) Adhering husk when covering more than 5 percent of the surface of the shell in the aggregate.

(c) Shriveling when the kernel is materially shrunken, wrinkled, leathery or tough.

(d) Discoloration when the appearance of the kernel is materially affected by black color.

§ 51.2004 Reasonably well developed.

Reasonably well developed means that the kernel fills one-half or more of the capacity of the shell.

§ 51.2005 Badly misshapen.

Badly misshapen means that the kernel is so malformed that the appearance is materially affected.

§ 51.2006 Rancidity.

Rancidity means that the kernel is noticeably rancid to the tate. An oily appearance of the flesh does not necessarily indicate a rancid condition.

§ 51.2007 Moldy.

Moldy means that there is a visible growth of mold either on the outside or the inside of the kernel.

§ 51.2008 Insect injury.

Insect injury means that the insect, frass or web is present inside the nut or the kernel shows definite evidence of insect feeding.

METRIC CONVERSION TABLE

§ 51.2009 Metric conversion table.

Inches	Millimeters (mm)
62/64	24.6
59/64	23.4
56/64	22.2
49/64	19.4
48/64	19.0
47/64	18.6
45/64	17.9
44/64	17.5
42/64	16.7
35/64	13.9
34/64	13.5

Subpart—United States Standards for Grades of Almonds in the Shell

SOURCE: 29 FR 7761, June 18, 1964, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.2075 U.S. No. 1.

''U.S. No. 1'' consists of almonds in the shell which are of similar varietal characteristics and free from loose extraneous and foreign material. The shells are clean, fairly bright, fairly uniform in color, and free from damage caused by discoloration, adhering hulls, broken shells or other means. The kernels are well dried, free from decay, rancidity, and free from damage caused by insects, mold, gum, skin discoloration, shriveling, brown spot or other means.

(a) Unless otherwise specified, the almonds are of a size not less than 28/64 of an inch in thickness.

(b) In order to allow for variations incident to proper grading and handling, the following tolerances are provided as specified:

(1) *For external* (*shell*) *defects.* 10 percent, by count, for almonds which fail to meet the requirements of this grade other than for variety and size;

(2) *For dissimilar varieties.* 5 percent, by count, including therein not more than 1 percent for bitter almonds mixed with sweet almonds;

(3) *For size.* 5 percent, by count, for almonds which are smaller than the specified minimum thickness;

(4) *For loose extraneous and foreign material.* 2 percent, by weight, including therein not more than 1 percent which can pass through a round opening 24/64 inch in diameter: *Provided,* That such material is practically free from insect infestation; and,

(5) *For internal* (*kernel*) *defects.* 10 percent, by count, for almonds with kernels failing to meet the requirements of this grade: *Provided,* That not more than one-half of this tolerance or 5 percent shall be allowed for kernels affected by decay or rancidity, damaged by insects or mold or seriously damaged by shriveling, including not more than one-half of 1 percent for almonds with live insects inside the shell.

§ 51.2076 U.S. No. 1 Mixed.

''U.S. No. 1 Mixed'' consists of almonds in the shell which meet the requirements of U.S. No. 1 grade, except that two or more varieties of sweet almonds are mixed.

§ 51.2077 U.S. No. 2.

''U.S. No. 2'' consists of almonds in the shell which meet the requirements of U.S. No. 1 grade, except that an additional tolerance of 20 percent shall be allowed for almonds with shells damaged by discoloration.

§ 51.2078 U.S. No. 2 Mixed.

''U.S. No. 2 Mixed'' consists of almonds in the shell which meet the requirements of U.S. No. 2 grade, except that two or more varieities of sweet almonds are mixed.

UNCLASSIFIED

§ 51.2079 Unclassified.

''Unclassified'' consists of almonds in the shell which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

APPLICATION OF TOLERANCES

§ 51.2080 Application of tolerances.

The tolerances for the foregoing grades are applied to the entire lot of almonds, based upon a composite sample drawn from containers throughout the lot.

DETERMINATION OF GRADE

§ 51.2081 Determination of grade.

In grading the inspection sample, the percentage of loose hulls, pieces of shell, chaff and foreign material is determined on the basis of weight. Next, the percentages of nuts which are of dissimilar varieties, undersize or have adhering hulls or defective shells are determined by count, using an adequate portion of the total sample. Finally, the nuts in that portion of the sample are cracked, and the percentage having internal defects is determined on the basis of count.

DEFINITIONS

§ 51.2082 Similar varietal characteristics.

Similar varietal characteristics means that the almonds are similar in shape, and are reasonably uniform in degree of hardness of the shells, and that bitter almonds are not mixed with sweet almonds. For example, hard-shelled varieties, semisoft shelled varieties, soft-shelled varieties and paper-shelled varieties are not mixed together, nor are any two of these types mixed under this definition.

§ 51.2083 Loose extraneous and foreign material.

Loose extraneous and foreign material means loose hulls, empty broken shells, pieces of shells, external insect infestation and any substance other than almonds in the shell or almond kernels.

§ 51.2084 Clean.

Clean means that the shell is practically free from dirt and other adhering foreign material.

§ 51.2085 Fairly bright.

Fairly bright means that the shells show good characteristic color.

§ 51.2086 Fairly uniform color.

Fairly uniform color means that the shells do not show excessive variation in color.

§ 51.2087 Well dried.

Well dried means that the kernel is firm and brittle, not pliable or leathery.

§ 51.2088 Decay.

Decay means that part or all of the kernel has become decomposed.

§ 51.2089 Rancidity.

Rancidity means that the kernel is noticeably rancid to the taste.

§ 51.2090 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, or any other defect, or any combination of defects which materially detracts from the appearance or the edible or shipping quality of the almond or of the lot. The following defects shall be considered as damage:

(a) Discoloration of the shell which is medium gray to black and affects more than one-eighth of the surface in the aggregate. Normal variations of a reddish or brownish color shall not be considered discoloration;

(b) Adhering hulls which cover more than 5 percent of the shell surface in the aggregate;

(c) Broken shells when a portion of the shell is missing, or the shell is broken or fractured to the extent that moderate pressure will permit the kernel to become dislodged;

(d) Insects when an insect or insect fragment, web or frass is present inside the shell, or the kernel shows distinct evidence of insect feeding;

(e) Mold when attached to the kernel and conspicuous; or when inconspicuous white or gray mold affects a total of more than one-eighth of the surface of the kernel;

(f) Gum which is shiny and resinous and covers more than one-eighth of the surface of the kernel;

(g) Skin discoloration when more than one-half of the surface of the kernel is affected by very dark or black stains contrasting with the natural color of the skin;

(h) Shriveling when the kernel is excessively thin or when less than three-fourths of the pellicle is filled with meat. An almond containing two kernels shall not be classed as damaged if either kernel has more than three-fourths of the pellicle filled with meat; and,

(i) Brown spot which affects an aggregate area on the kernel greater than the area of a circle one-eighth inch in diameter.

§ 51.2091 Serious damage.

Serious damage means the specific defect described in this section; or an equally objectionable variation of this defect, or any other defect, or any combination of defects which seriously detracts from the appearance or the edible or shipping quality of the almond. The following defect shall be considered as serious damage:

(a) Shriveling when less than one-fourth of the pellicle is filled with meat. An almond containing two kernels shall not be classed as seriously damaged if either kernel has more than one-fourth of the pellicle filled with meat.

§ 51.2092 Thickness.

Thickness means the greatest dimensions between the two semi-flat surfaces of the shell measured at right angles to a plane extending between the seams of the shell.

Subpart—United States Standards for Grades of Shelled Almonds

SOURCE: 25 FR 7273, Aug. 3, 1960, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.2105 U.S. Fancy.

''U.S. Fancy'' consists of shelled almonds of similar varietal characteristics which are whole, clean and well dried, and which are free from decay,

rancidity, insect injury, foreign material, doubles, split or broken kernels, particles and dust, and free from injury caused by chipped and scratched kernels, and free from damage caused by mold, gum, shriveling, brown spot or other means. (See §§51.2114 and 51.2115.)

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For dissimilar varieties.* 5 percent, including not more than one-fifth of this amount, or 1 percent, for bitter almonds mixed with sweet almonds;

(2) *For doubles.* 3 percent;

(3) *For kernels injured by chipping and/or scratching.* 5 percent;

(4) *For foreign material.* Two-tenths of 1 percent (0.20%);

(5) *For particles and dust.* One-tenth of 1 percent (0.10%); and,

(6) *For other defects.* 2 percent, including not more than one-half of this amount, or 1 percent, for split or broken kernels, and including not more than one-half of the former amount, or 1 percent, for seriously damaged kernels.

§51.2106 U.S. Extra No. 1.

''U.S. Extra No. 1'' consists of shelled almonds of similar varietal characteristics which are whole, clean and well dried, and which are free from decay, rancidity, insect injury, foreign material, doubles, split or broken kernels, particles and dust, and free from damage caused by chipped and scratched kernels, mold, gum, shriveling, brown spot or other means. (See §§51.2114 and 51.2115.)

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For dissimilar varieties.* 5 percent, including not more than one-fifth of this amount, or 1 percent, for bitter almonds mixed with sweet almonds;

(2) *For doubles.* 5 percent;

(3) *For kernels damaged by chipping and/or scratching.* 5 percent;

(4) *For foreign material.* Two-tenths of 1 percent (0.20%);

(5) *For particles and dust.* One-tenth of 1 percent (0.10%); and,

(6) *For other defects.* 4 percent, including not more than one-fourth of this amount, or 1 percent, for split or broken kernels, and including not more than three-eighths of the former amount, or 1½ percent, for seriously damaged kernels.

§51.2107 U.S. No. 1.

''U.S. No. 1'' consists of shelled almonds of similar varietal characteristics which are whole, clean and well dried, and which are free from decay, rancidity, insect injury, foreign material, doubles, split or broken kernels, particles and dust, and free from damage caused by chipped and scratched kernels, mold, gum, shriveling, brown spot or other means. (See §§51.2114 and 51.2115.)

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For dissimilar varieties.* 5 percent, including not more than one-fifth of this amount, or 1 percent, for bitter almonds mixed with sweet almonds;

(2) *For doubles.* 15 percent;

(3) *For kernels damaged by chipping and/or scratching.* 10 percent;

(4) *For foreign material.* Two-tenths of 1 percent (0.20%);

(5) *For particles and dust.* One-tenth of 1 percent (0.10%); and,

(6) *For other defects.* 5 percent including not more than one-fifth of this amount, or 1 percent, for split or broken kernels, and including not more than three-tenths of the former amount, or 1½ percent, for seriously damaged kernels.

§51.2108 U.S. Select Sheller Run.

''U.S. Select Sheller Run'' consists of shelled almonds of similar varietal characteristics which are whole, clean and well dried, and which are free from decay, rancidity, insect injury, foreign material, doubles, split or broken kernels, particles and dust, and free from damage caused by chipped and scratched kernels, mold, gum, shriveling, brown spot or other means. (See §§51.2114 and 51.2115.)

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For dissimilar varieties.* 5 percent, including not more than one-fifth of

this amount, or 1 percent, for bitter almonds mixed with sweet almonds;

(2) *For doubles.* 15 percent;

(3) *For kernels damaged by chipping and/or scratching.* 20 percent;

(4) *For foreign material.* Two-tenths of 1 percent (0.20%);

(5) *For particles and dust.* One-tenth of 1 percent (0.10%);

(6) *For split and broken kernels.* 5 percent: *Provided,* That not more than two-fifths of this amount, or 2 percent, shall be allowed for pieces which will pass through a round opening 20/64 inch in diameter; and,

(7) *For other defects.* 3 percent, including not more than two-thirds of this amount, or 2 percent, for serious damage.

§ 51.2109 U.S. Standard Sheller Run.

''U.S. Standard Sheller Run'' consists of shelled almonds of similar varietal characteristics which are whole, clean and well dried, and which are free from decay, rancidity, insect injury, foreign material, doubles, split or broken kernels, particles and dust, and free from damage caused by chipped and scratched kernels, mold, gum, shriveling, brown spot or other means. (See §§ 51.2114 and 51.2115.)

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For dissimilar varieties.* 5 percent, including not more than one-fifth of this amount, or 1 percent, for bitter almonds mixed with sweet almonds;

(2) *For doubles.* 25 percent;

(3) *For kernels damaged by shipping and/or scratching.* 20 percent;

(4) *For foreign material.* Two-tenths of 1 percent (0.20%);

(5) *For particles and dust.* One-tenth of 1 percent (0.10%);

(6) *For split and broken kernels.* 15 percent: *Provided,* That not more than one-third of this amount, or 5 percent, shall be allowed for pieces which will pass through a round opening 20/64 inch in diameter; and,

(7) *For other defects.* 3 percent, including not more than two-thirds of this amount, or 2 percent, for serious damage.

§ 51.2110 U.S. No. 1 Whole and Broken.

''U.S. No. 1 Whole and Broken'' consists of shelled almonds of similar varietal characteristics which are clean and well dried, and which are free from decay, rancidity, insect injury, foreign material, doubles, particles and dust, and free from damage caused by mold, gum, shriveling, brown spot or other means.

(a) In this grade not less than 30 percent, by weight, of the kernels shall be whole. Doubles shall not be considered as whole kernels in determining the percentage of whole kernels.

(b) Unless otherwise specified, the minimum diameter shall be not less than 20/64 of an inch. (See §§ 51.2114 and 51.2115.)

(c) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For dissimilar varieties.* 5 percent, including not more than one-fifth of this amount, or 1 percent, for bitter almonds mixed with sweet almonds;

(2) *For doubles.* 35 percent;

(3) *For foreign material.* Three-tenths of 1 percent (0.30%);

(4) *For particles and dust.* One-tenth of 1 percent (0.10%);

(5) *For undersize.* 5 percent; and,

(6) *For other defects.* 5 percent, including not more than three-fifths of this amount, or 3 percent, for serious damage.

§ 51.2111 U.S. No. 1 Pieces.

''U.S. No. 1 Pieces'' consists of shelled almonds which are not bitter, which are clean and well dried, and which are free from decay, rancidity, insect injury, foreign material, particles and dust, and free from damage caused by mold, gum, shriveling, brown spot or other means.

(a) Unless otherwise specified, the minimum diameter shall be not less than 8/64 of an inch. (See §§ 51.2114 and 51.2115.)

(b) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) *For bitter almonds mixed with sweet almonds.* 1 percent;

(2) *For foreign material.* Three-tenths of 1 percent (0.30%);

(3) *For particles and dust.* 1 percent; and,

(4) *For other defects.* 5 percent, including not more than three-fifths of this amount, or 3 percent, for serious damage.

MIXED VARIETIES

§ 51.2112 Mixed varieties.

Any lot of shelled almonds consisting of a mixture of two or more dissimilar varieties which meet the other requirements of any of the grades of U.S. No. 1, U.S. Select Sheller Run, U.S. Standard Sheller Run, U.S. No. 1 Whole and Broken may be designated as: ''U.S. No. 1 Mixed;'' ''U.S. Select Sheller Run Mixed;'' ''U.S. No. 1 Whole and Broken Mixed,'' respectively; but no lot of any of these grades may include more than 1 percent of bitter almonds mixed with sweet almonds.

UNCLASSIFIED

§ 51.2113 Unclassified.

''Unclassified'' consists of shelled almonds which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

SIZE

§ 51.2114 Size requirements.

The size may be specified in terms of range in count of whole almonds kernels per ounce or in terms of minimum, or minimum and maximum diameter. When a range in count is specified, the whole kernels shall be fairly uniform in size, and the average count per ounce shall be within the range specified. Doubles and broken kernels shall not be used in determining counts. Count ranges per ounce commonly used are shown below, but other ranges may be specified: *Provided,* That the kernels are fairly uniform in size.

COUNT RANGE PER OUNCE

16 to 18, inclusive.
18 to 20, inclusive.
20 to 22, inclusive.
22 to 24, inclusive.
23 to 25, inclusive.
24 to 26, inclusive.
26 to 28, inclusive.
27 to 30, inclusive.
30 to 34, inclusive.
34 to 40, inclusive.
40 to 50 inclusive.
50 and smaller.

§ 51.2115 Tolerances for size.

(a) When a range is specified as, for example, ''18/20,'' no tolerance for counts above or below the range shall be allowed.

(1) When the minimum, or minimum and maximum diameters are specified, a total tolerance of not more than 10 percent, by weight, may fail to meet the specified size requirements: *Provided,* That not more than one-half of this amount, or 5 percent, may be below the minimum size specified.

APPLICATION OF TOLERANCES

§ 51.2116 Application of tolerances.

The tolerances for the grades are to be applied to the entire lot, and a composite sample shall be taken for determining the grade. However, any container or group of containers in which the almonds are found to be materially inferior to those in the majority of the containers shall be considered as separate lot.

DEFINITIONS

§ 51.2117 Similar varietal characteristics.

Similar varietal characteristics means that the kernels are similar in shape and appearance. For example, long types shall not be mixed with short types, or broad types mixed with narrow types, and bitter almonds shall not be mixed with sweet almonds. Color of the kernels shall not be considered, since there is often a marked difference in skin color of kernels of the same variety.

§ 51.2118 Whole.

Whole means that there is less than one-eighth of the kernel chipped off or missing, and that the general contour of the kernel is not materially affected by the missing part.

§ 51.2119 Clean.

Clean means that the kernel is practically free from dirt and other foreign substance.

§ 51.2120 Well dried.

Well dried means that the kernel is firm and brittle, and not pliable or leathery.

§ 51.2121 Decay.

Decay means that the kernel is putrid or decomposed.

§ 51.2122 Rancidity.

Rancidity means that the kernel is noticeably rancid to the taste.

§ 51.2123 Insect injury.

Insect injury means that the insect, web, or frass is present or there is definite evidence of insect feeding.

§ 51.2124 Foreign material.

Foreign material means pieces of shell, hulls or other foreign matter which will not pass through a round opening 8/64 of an inch in diameter.

§ 51.2125 Doubles.

Doubles means kernels that developed in shells containing two kernels. One side of a double kernel is flat or concave.

§ 51.2126 Split or broken kernels.

Split or broken kernels means seven-eighths or less of complete whole kernels but which will not pass through a round opening 8/64 of an inch in diameter.

§ 51.2127 Particles and dust.

Particles and dust means fragments of almonds kernels or other material which will pass through a round opening 8/64 of an inch in diameter.

§ 51.2128 Injury.

Injury means any defect which more than slightly detracts from the appearance of the individual almond, or the general appearance of the lot. The following shall be considered as injury:

(a) Chipped and scratched kernels when the general appearance of the lot is more than slightly affected, or when the affected are on an individual kernel aggregates more than the equivalent of a circle one-eighth inch in diameter.

§ 51.2129 Damage.

Damage means any defect which materially detracts from the appearance of the individual kernel, or the general appearance of the lot, or the edible or shipping quality of the almonds. Any one of the following defects or combination thereof, the seriousness of which exceeds the maximum allowed for any one defect shall be considered as damage:

(a) Chipped and scratched kernels, when the general appearance of the lot is materially affected, or when the affected area on an individual kernel aggregates more than the equivalent of a circle one-quarter inch in diameter;

(b) Mold, when visible on the kernel, except when white or gray and easily rubbed off with the fingers;

(c) Gum, when a film of shiny, resinous appearing substance covers more than one-eighth of the surface of the kernel;

(d) Shriveling, when the kernel is excessively thin for its size, or when materially withered, shrunken, leathery, tough or only partially developed: *Provided,* That partially developed kernels are not considered damaged if more than three-fourths of the pellicle is filled with meat; and,

(e) Brown spot on the kernel, either single or multiple, when the affected area aggregates more than the equivalent of a circle one-eighth inch in diameter.

§ 51.2130 Serious damage.

Serious damage means any defect which makes a kernel or piece of kernel unsuitable for human consumption, and includes decay, rancidity, insect injury and damage by mold.

§ 51.2131 Diameter.

Diameter means the greatest dimension of the kernel, or piece of kernel at right angles to the longitudinal axis.

Diameter shall be determined by passing the kernel or piece of kernel through a round opening.

§ 51.2132 Fairly uniform in size.

Fairly uniform in size means that, in a representative sample, the weight of 10 percent, by count, of the largest whole kernels shall not exceed 1.70 times the weight of 10 percent, by count, of the smallest whole kernels.

Subpart—United States Standards for Shelled English Walnuts (Juglans Regia)

SOURCE: 23 FR 10354, Dec. 25, 1958, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.2275 Application.

The standards contained in this subpart apply only to walnuts commonly known as English or Persian walnuts (Juglans regia). They do not apply to walnuts commonly known as black walnuts (Juglans nigra).

§ 51.2276 Color chart.

The color chart (USDA Walnut Color Chart) to which reference is made in §§ 51.2281 and 51.2282 illustrates the four shades of walnut skin color listed as color classifications.

(a) *Availability of color chart.* The USDA Walnut Color Chart cited in this subpart has been filed with the original document and is available for inspection in the Office of the Federal Register. The color chart is also available for inspection in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250, in any field office of the Fresh Fruit and Vegetable Inspection Service of the Fruit and Vegetable Division, or upon request of any authorized inspector of such Service. Copies of the color chart may be purchased from Munsell Color Co., Inc., 2441 North Calvert Street, Baltimore, Md. 21218.

[33 FR 10840, July 31, 1968. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

GRADES

§ 51.2277 U.S. No. 1.

''U.S. No. 1'' consists of portions of walnut kernels which are well dried, clean, free from shell, foreign material, insect injury, decay, rancidity, and free from damage caused by shriveling, mold, discoloration of the meat or other means. (See § 51.2280.)

(a) Color shall be specified in connection with this grade in terms of one of the color classifications. (See §§ 51.2276, 51.2281 and 51.2282.)

(b) Size shall be specified in connection with this grade in terms of one of the size classifications. (See §§ 51.2284 and 51.2285.)

§ 51.2278 U.S. Commercial.

''U.S. Commercial'' consists of portions of walnut kernels which meet the requirements of U.S. No. 1 grade, except for increased tolerances. (See § 51.2280.)

(a) Color of walnuts in this grade shall be not darker than ''amber'' classification, and color need not be specified. However, color may be specified in connection with the grade in terms of one of the color classifications. (See §§ 51.2276, 51.2281 and 51.2282.)

(b) Size shall be specified in connection with this grade in terms of one of the size classifications. (See §§ 51.2284 and 51.2285.)

UNCLASSIFIED

§ 51.2279 Unclassified.

''Unclassified'' consists of portions of walnut kernels which have not been classified in accordance with either of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES FOR GRADE DEFECTS

§ 51.2280 Tolerances for grade defects.

(a) All percentages shall be claculated on the basis of weight.

(b) In order to allow for variations, other than for color and size, incident to proper grading and handling, tolerances shall be permitted for the respective grades as indicated in Table I:

TABLE I

[Percent]

Grade	Tolerances for grade defects			
	Total defects	Serious damage	Very serious damage	Shell and foreign material
U. S. No. 1	5	2 (included in 5 percent total defects).	1 (included in 2 percent serious damage).	0.05 (included in 1 percent very serious damage).
U.S. Commercial	8	4 (included in 8 percent total defects).	2 (included in 4 percent serious damage).	0.05 (included in 2 percent very serious damage).

COLOR REQUIREMENTS

§ 51.2281 Color classifications.

The following classifications are provided to describe the color of any lot: ''Extra Light'', ''Light'', ''Light Amber'' or ''Amber''. The portions of kernels in the lot shall not be darker than the darkest color permitted in the specified classification as shown on the color chart.

§ 51.2282 Tolerances for color.

(a) All percentages shall be calculated on the basis of weight.

(b) In order to allow for variations incident to proper grading and handling, tolerances shall be permitted for the respective color classifications as indicated in Table II:

TABLE II

Color classification	Tolerances for color			
	Darker than extra light [1]	Darker than light [1]	Darker than light amber [1]	Darker than amber [1]
Extra light	15 percent	2 percent (included in 15 percent darker than extra light).	.	
Light		15 percent	2 percent (included in 15 percent darker than light).	
Light amber			15 percent	2 percent (included in 15 percent darker than light amber).
Amber				10 percent.

[1] See illustration of this term on color chart.

§ 51.2283 Off color.

The term ''off color'' is not a color classification, but shall be applied to any lot which fails to meet the requirements of the ''Amber'' classification.

SIZE REQUIREMENTS

§ 51.2284 Size classification.

The following classifications are provided to describe the size of any lot: ''Halves'', ''Pieces and Halves'', ''Pieces'' or ''Small Pieces''. The size of portions of kernels in the lot shall conform to the requirements of the specified classification as defined below:

(a) *Halves.* Lot consists of 85 percent or more, by weight, half kernels, and the remainder three-fourths half kernels. (See § 51.2285.)

(b) *Pieces and halves.* Lot consists of 20 percent or more, by weight, half kernels, and the remainder portions of kernels that cannot pass through a sieve with 24/64 inch round openings. When a lot exceeds this minimum requirement, the actual percentage of halves may be specified. (See § 51.2285.)

(c) *Pieces.* Lot consists of portions of kernels that cannot pass through a sieve with 24/64 inch round openings. (See § 51.2285.)

(d) *Small pieces.* Lot consists of portions of kernels that pass through a sieve with 24/64 inch round openings, but that cannot pass through a sieve with 8/64 inch round openings. When desired, the actual size ranges within such size ranges may be specified. (See § 51.2285.)

§ 51.2285 Tolerances for size.

(a) All percentages shall be calculated on the basis of weight.

(b) In order to allow for variations incident to proper sizing and handling, tolerances shall be permitted for the respective size classifications as indicated in Table III:

TABLE III

[Percent]

Size classification	Tolerances for size				
	Smaller than three-fourths halves	Will not pass through 24/64 inch round hole	Pass through 24/64 inch round hole	Pass through 16/64 inch round hole	Pass through 8/64 inch round hole
Halves	5			1 (included in 5 percent).	
Pieces and halves [1]			18	3 (included in 18 percent).	1 (included in 2 percent).
Pieces			25	5 (included in 25 percent).	1 (included in 5 percent).
Small pieces [2]		10			2.

[1] No part of any tolerance shall be used to reduce the percentage of halves required or specified in a lot of ''pieces and halves''.

[2] The tolerances of 10 percent and 2 percent for ''small pieces'' classification shall apply, respectively, to any smaller maximum or any larger minimum sizes specified.

APPLICATION OF TOLERANCES

§ 51.2286 Application of tolerances.

The tolerances provided in these standards are on a lot basis, and they shall be applied to a composite sample representative of the lot. However, any container or group of containers in which the walnuts are obviously of a quality materially different from that in the majority of containers shall be considered a separate lot, and shall be sampled separately.

DEFINITIONS

§ 51.2287 Well dried.

Well dried means that the portion of kernel is firm and crisp, not pliable or leathery.

§ 51.2288 Clean.

Clean means that the appearance of the individual portion of kernel, or of the lot as a whole, is not materially affected by adhering dust, dirt or other foreign material.

§ 51.2289 Shell.

Shell means the outer shell and/or the woody partition from between the halves of the kernel, and any fragments of either.

§ 51.2290 Insect injury.

Insect injury means that the insect, web, frass or other evidence of insects is present on the portion of kernel.

§ 51.2291 Rancidity.

Rancidity means that the portion of kernel is noticeably rancid to the taste. Rancidity should not be confused with a slightly astringent flavor of the pellicle (skin) or with staleness (the state at which the flavor is flat but not objectionable).

§ 51.2292 Damage.

Damage means any defect, other than color, which materially affects the appearance, or the edible or shipping quality of the individual portion of kernel, or of the lot as a whole. Any one of the following defects or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect shall be considered as damage:

(a) Shriveling when more than one-eighth of the portion of kernel is severely shriveled, or a greater area is affected by lesser degrees of shriveling

producing an equally objectionable appearance, except that kernels which are thin in corss-section but which are otherwise normally developed shall not be considered as damaged;

(b) Mold when plainly visible;

(c) Discoloration of the meat when more than one-eighth the volume of the portion of kernel is severely discolored, or a greater volume is affected by lesser degrees of discoloration producing an equally objectionable appearance;

(d) Not well dried; and,

(e) Not clean.

§ 51.2293 Serious damage.

Serious damage means any defect, other than color, which seriously affects the appearance, or the edible or shipping quality of the individual portion of kernel or of the lot as a whole. Any one of the following defects or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect shall be considered as serious damage:

(a) Shriveling when more than one-fourth of the kernel is severely shriveled, or a greater area is affected by lesser degrees of shriveling producing an equally objectionable appearance;

(b) Mold when plainly visible on more than one-eighth of the surface of the kernel in the aggregate; and,

(c) Discoloration of the meat when more than one-fourth the volume of the portion of kernel is severely discolored, or a greater volume is affected by lesser degrees of discoloration producing an equally objectionable appearance.

§ 51.2294 Very serious damage.

Very serious damage means any defect, other than color, which very seriously affects the appearance, or the edible or shipping quality of the individual portion of kernel or of the lot as a whole. Any one of the following defects or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect shall be considered as very serious damage:

(a) Shriveling when more than 50 percent of the portion of kernel is severely shriveled;

(b) Mold when plainly visible on more than one-fourth of the surface of the portion of kernel in the aggregate;

(c) Discoloration of the meat when more than one-half the volume of the portion of kernel is severely discolored;

(d) Insect injury;

(e) Rancidity or decay; and,

(f) Shell, or any foreign material.

§ 51.2295 Half kernel.

Half kernel means the separated half of a kernel with not more than one-eighth broken off.

§ 51.2296 Three-fourths half kernel.

Three-fourths half kernel means a portion of a half of a kernel which has more than one-eighth but not more than one-fourth broken off.

Subpart—United States Standards for Grades of Kiwifruit

SOURCE: 47 FR 34513, Aug. 10, 1982, unless otherwise noted.

§ 51.2335 Grades.

(a) ''U.S. Fancy'' consists of kiwifruit which meet the following requirements:

(1) Basic Requirements:

(i) Similar varietal characteristics;

(ii) Mature;

(iii) Not soft, overripe, or shriveled;

(iv) Carefully packed;

(v) Clean; and,

(vi) Well formed.

(2) Free From:

(i) Worm holes;

(ii) Broken skins which are not healed;

(iii) Sunscald;

(iv) Freezing injury;

(v) Internal breakdown; and,

(vi) Decay.

(3) Free From Injury By:

(i) Bruises;

(ii) Leaf or limbrubs;

(iii) Discoloration;

(iv) Hail;

(v) Growth cracks;

(vi) Scab;

(vii) Scars;

(viii) Heat, sprayburn, or sunburn;

(ix) Scale;

(x) Insects;

(xi) Other diseases; and,

(xii) Mechanical or other means.

(4) Tolerances. (See § 51.2336)

(b) ''U.S. No. 1'' consists of kiwifruit which meet the following requirements:

(1) Basic Requirements:

(i) Similar varietal characteristics;

(ii) Mature;

(iii) Not soft, overripe, or shriveled;

(iv) Carefully packed;

(v) Clean; and,

(vi) Fairly well formed.

(2) Free From:

(i) Worm holes;

(ii) Broken skins which are not healed;

(iii) Sunscald;

(iv) Freezing injury;

(v) Internal breakdown; and,

(vi) Decay.

(3) Free From Damage By:

(i) Bruises;

(ii) Leaf or limbrubs;

(iii) Discoloration;

(iv) Hail;

(v) Growth cracks;

(vi) Scab;

(vii) Scars;

(viii) Heat, sprayburn, or sunburn;

(ix) Scale;

(x) Insects;

(xi) Other diseases; and,

(xii) Mechanical or other means.

(4) Tolerances. (See § 51.2336):

(c) ''U.S. No. 2'' consists of kiwifruit which meet the following requirements:

(1) Basic Requirements:

(i) Similar varietal characteristics;

(ii) Mature;

(iii) Not soft, overripe, or shriveled;

(iv) Carefully packed;

(v) Fairly clean; and,

(vi) Not badly misshapen.

(2) Free From:

(i) Worm holes;

(ii) Broken skins which are not healed;

(iii) Sunscald;

(iv) Freezing injury;

(v) Internal breakdown; and,

(vi) Decay.

(3) Free From Serious Damage By:

(i) Bruises;

(ii) Leaf or limbrubs;

(iii) Discoloration;

(iv) Hail;

(v) Growth cracks;

(vi) Scab;

(vii) Scars;

(viii) Heat, sprayburn, or sunburn;

(ix) Scale;

(x) Insects;

(xi) Other diseases; and,

(xii) Mechanical or other means.

(4) Tolerances. (See § 51.2336)

[47 FR 34513, Aug. 10, 1982, as amended at 51 FR 36682, Oct. 15, 1986]

§ 51.2336 Tolerances.

In order to allow for variations incident to proper grading and handling, the following tolerances by count, shall be permitted in any lot:

(a) U.S. Fancy and U.S. No. 1.

(1) For defects at shipping point.[2] 8 percent for fruit which fail to meet the requirements of the specified grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for fruit affected by internal breakdown or decay.

(2) For defects en route or at destination. 12 percent for fruit which fail to meet the requirements of the specified grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects:

(i) 8 percent for permanent defects;

(ii) 6 percent for defects causing serious damage, including therein not more than 4 percent for serious damage by permanent defects and not more than 2 percent for fruit affected by internal breakdown or decay.

(b) U.S. No. 2.

(1) For defects at shipping point.[2] 8 percent for fruit which fail to meet the requirements of this grade: *Provided,* That included in this amoung not more than 4 percent shall be allowed for sunscald, insects, internal breakdown or decay, including in this latter amount not more than 1 percent for fruit affected by internal breakdown or decay.

(2) For defects en route or at destination. 12 percent for fruit which fail to

[2] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

meet the requirements of this grade: *Provided*, That included in this amount not more than the following percentages shall be allowed for defects:

(i) 8 percent for permanent defects including therein not more than 4 percent for sunscald, or insects; and,

(ii) 2 percent for internal breakdown or decay.

§ 51.2337 Application of tolerances.

The contents of individual containers in a lot, based on sample inspection, are subject to the following limitations:

(a) Individual samples shall not have more than double a specified tolerance except that at least two defective specimens may be permitted in any container: *Provided*, That not more than one fruit which is frozen or affected by decay be permitted in any container 3 pounds or less; and, *Provided further*, That the averages for the entire lot are within the tolerances specified for the grade.

[47 FR 34513, Aug. 10,1982, as amended at 50 FR 40186, Oct. 2, 1985; 51 FR 4293, Feb. 4, 1986]

§ 51.2338 Standard pack.

(a) Fruit shall be fairly uniform in size and shall be packed in boxes, flats, lugs, or cartons and arranged according to approved and recognized methods. Containers shall be well filled; contents tightly packed but not be excessively or unnecessarily bruised by overfilling or oversizing. Fruit in the shown face of the container shall be reasonably representative in size and quality of the contents.

(b) When packed in closed containers the size shall be indicated by marking the container with the numerical count.

(c) Boxes, flats, lugs, or cartons:

(1) Fruit packed in containers with cell compartments, cardboard fillers or molded trays shall be of proper size for the cells, fillers, or molds in which they are packed, and conform to the marked count.

(2) In order to allow for variations incident to proper packing in other types of containers, for example, lugs, cartons, or boxes, the number of fruit shall not vary more than two from the marked count.

(d) ''Fairly uniform in size'' means that fruit in containers marked numerically to denote size may not vary in diameter more than ½ inch (12.7mm) in sizes 30 or larger; ⅜ inch (9.5mm) is sizes 31 through 38; and ¼ inch (6.4mm) in sizes 39 or smaller. Not more than 5 percent, by count, of the fruit in any container may exceed the diameter range specified.

(e) ''Diameter'' means the greatest dimension measured at right angles to a line from stem to blossom end.

(f) In order to allow for variations incident to proper sizing and packing, not more than 10 percent, by count, of containers in any lot may fail to meet these requirements.

[47 FR 34513 Aug. 10, 1982, as amended at 50 FR 40186, Oct. 2, 1985; 51 FR 4293, Feb. 4, 1986]

§ 51.2339 Definitions.

Similar varietal characteristics means the fruit in any lot and container are similar in shape, color of skin and flesh.

Mature means the fruit has reached the stage of development which will ensure the proper completion of the ripening process. The minimum average soluble solids, unless otherwise specified, shall be not less than 6.5 percent.

Clean means the fruit is practically free from dirt, dust, or other foreign material.

Fairly clean means the fruit is reasonably free from dirt, dust, or other foreign material.

Well formed means the fruit has the shape characteristic of the variety and slight bumps or other roughness are permitted providing they do not detract from the appearance.

Fairly well formed means the fruit has the shape characteristic of the variety but slight bumps or other roughness are permitted providing they do not materially detract from appearance.

Badly misshapen means the fruit is so decidely deformed that its appearance is seriously affected.

Carefully packed means the fruit shows no evidence of rough handling.

Injury means any defect described in § 51.2340, or an equally objectionable variation of any one of these defects, any other defect, or any combination

of defects, which more than slightly detracts from the appearance, or the edible or marketing quality.

Damage means any defect described in § 51.2340 or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality.

Serious damage means any defect described in § 51.2340 or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality.

Permanent defects means those which are not subject to change during shipment or storage, for example, shape, scars, or growth cracks.

Condition defects means those defects which are subject to change during shipment or storage, for example, decay, soft, shriveling, discoloration, or bruises.

[47 FR 34513, Aug. 10, 1982, as amended at 50 FR 40186, Oct. 2, 1985; 51 FR 36682, Oct. 15, 1986; 51 FR 4293, Feb. 4, 1986]

§ 51.2340 Classification of defects.

Defects	Injury	Damage	Serious damage
Bruises	When any slight indentation of the fruit or discoloration of the flesh extends more than 1/16 inch (1.6 mm) in depth.	When surface of fruit is indented and discoloration of the flesh extends deeper than 1/8 inch (3.2 mm), or causing slight discoloration exceeding the area of a circle 3/8 inch (9.5 mm) in diameter, or lesser bruises aggregating an area of a circle 3/8 inch (9.5 mm) in diameter which materially detract from the appearance, edible or shipping quality.	When surface of the fruit is indented and discoloration of the flesh extends deeper than 1/4 inch (6.4 mm), or causing discoloration exceeding the area of a circle 1/2 inch (12.7 mm) in diameter, or lesser bruises which seriously detract from the appearance, edible or shipping quality.
Leaf or Limbrubs	When not smooth, or not light colored, or aggregating more than the area of a circle 3/8 inch (9.5 mm) in diameter.	When not smooth, or not light colored, or aggregating more than the area of a circle 1/2 inch (12.7 mm) in diameter.	When smooth and light colored and aggregating more than the area of a circle 1-1/2 inches (38.1 mm) in diameter, or dark or slightly rough and barklike scars aggregating more than the area of a circle 3/4 inch (19.1 mm) in diameter.
Discoloration	When color and pattern causes a distinct noticeable appearance (except for water staining) affecting more than 5% of surface.	When color and pattern causes an unattractive appearance (except for water staining) affecting more than 10% of surface.	When color and pattern causes a distinct unattractive appearance (except for water staining) affecting more than 25% of surface.
Hail Injury	When unhealed or deep, or aggregating more than the area of a circle 1/16 inch (1.6 mm) in diameter.	When unhealed or deep, or aggregating more than the area of a circle 1/4 inch (6.4 mm) in diameter.	When unhealed or deep, or aggregating more than the area of a circle 1/2 inch (12.7 mm) in diameter.
Growth Cracks	When not healed, or more than one in number, or more than 1/8 inch (3.2 mm) in length or depth.	When not healed, or more than one in number, or more than 1/8 inch (3.2 mm) in depth, or more than 3/8 inch (9.5 mm) in length if within the stem cavity, or more than 1/4 inch (6.4 mm) in length if outside the stem cavity.	When not healed and more than 1/8 inch (3.2 mm) in length or depth, or healed and more than 3/16 inch (4.8 mm) in depth, or healed and aggregating more than 5/8 inch (15.9 mm) in length if within the stem cavity, or healed and aggregating more than 1/2 inch (12.7 mm) in length if outside the stem cavity.
Scab	When cracked, or the aggregate area exceeds that of a circle 1/8 inch (3.2 mm) in diameter.	When cracked, or the aggregate area exceeds that of a cricle 1/4 inch (6.4 mm) in diameter.	When the aggregate area exceeds that of a circle 1/2 inch (12.7 mm) in diameter.
Scars	When not smooth, or surface of the fruit is depressed more than 1/32 inch (.8 mm), or not light in color, or when exceeding any of the following aggregate areas, or a combination of two or more types of scars, the seriousness of which exceeds the maximum allowed for any one type: (1) Dark or rough scars when the area exceeds that of a circle 1/8 inch (3.2 mm) in diameter; (2) Fairly light colored, fairly smooth scars when the area exceeds that of a circle 1/4 inch (6.4 mm) in diameter; (3) Light colored, smooth scars when the area exceeds that of a circle 1/2 inch (12.7 mm) in diameter.	When not smooth, or surface of the fruit is depressed more than 1/16 inch (1.6 mm), or when exceeding any of the following aggregate areas, or a combination of two or more types of scars, the seriousness of which exceeds the maximum allowed for any one type: (1) Dark or rough scars when the area exceeds that of a circle 1/4 inch (6.4 mm) in diameter; (2) Fairly light colored, fairly smooth scars when the area exceeds that of a circle 1/2 inch (12.7 mm) in diameter; (3) Light colored, smooth scars when the area exceeds that of a circle 3/4 inch (19.1 mm) in diameter.	When the surface of the fruit is depressed more than 3/16 inch (4.8 mm), or when exceeding any of the following aggregate areas, or a combination of two or more types of scars, the seriousness of which exceeds the maximum allowed for any one type: (1) Dark or rough scars when the area exceeds that of a circle 3/4 inch (19.1 mm) in diameter; (2) Not dark or rough when the area exceeds one-fourth of the fruit surface.

Heat, Sprayburn and Sunburn.	When the normal color of the skin or flesh is more than slightly changed, or any indentation is present.	When the skin is blistered, cracked or decidedly flattened, or the normal color of the skin or flesh has materially changed, or more than one indentation, or indentation exceeds 3/16 inch (4.8 mm) in diameter.	When the skin is blistered, cracked or decidedly flattened, or causing any dark discoloration of the flesh, or more than two indentations are present, or the aggregate area of indentations exceeds that of a circle 3/8 inch (9.5 mm) in diameter, or when causing a noticeable brownish or darker discoloration over more than one-fourth of surface.
Scale or Scale Marks.	When more than one large scale or scale mark or more than three scales or scale marks of any size are present.	When the aggregate area exceds that of a circle 1/4 inch (6.4 mm) in diameter.	When the aggregate area exceeds that of a circle 3/8 inch (9.5 mm) in diameter.
Insects	When feeding injury is evident on fruit or any insect is present in fruit.	When feeding injury materially detracts from appearance or any insect is present in fruit.	When feeding injury seriously detracts from appearance or any insect is present in fruit.

Classification of defects guidelines are based on fruit 2 inches or smaller in diameter. Accordingly, *larger fruit* are permitted to have defects relative to their size.

§ 51.2341 Sample size for grade determination.

For fruit place-packed in tray pack containers, the sample shall consist of the contents of the individual container. For fruit jumble-packed in volume filled containers, the sample shall consist of at least 50 fruit. When individual containers contain at least 50 fruit, each individual sample is drawn from one container. When individual containers contain less than 50 fruit, a sufficient number of adjoining containers are opened to form a 50 fruit sample.

[50 FR 40186, Oct. 2, 1985; 50 FR 40961, Oct. 8, 1985; 51 FR 4293, Feb. 4, 1986]

Subpart—United States Standards for Grades of Pistachio Nuts in the Shell

SOURCE: 51 FR 27814, Aug. 4, 1986, unless otherwise noted.

§ 51.2540 General.

(a) Compliance with the provisions of these standards shall not excuse failure to comply with provisions of applicable Federal or State laws.

(b) These standards are applicable to pistachio nuts in the shell which may be in a natural, dyed, raw, roasted, or salted state; or in any combination thereof. However, nuts of obviously dissimilar forms shall not be commingled.

§ 51.2541 Grades.

''U.S. Fancy,'' ''U.S. No. 1,'' ''U.S. No. 2,'' and ''U.S. No. 3'' consist of pistachio nuts in the shell which meet the following requirements.

(a) Basic requirements:

(1) Free from:

(i) Foreign material;

(ii) Loose kernels;

(iii) Shell pieces;

(iv) Particles and dust; and,

(v) Blanks.

(b) Shells:

(1) Free from:

(i) Non-split shells; and

(ii) Shells not split on suture.

(2) Free from damage by:

(i) Adhering hull material;

(ii) Light stained;

(iii) Dark stained; and

(iv) Other external (shell) defects.

(c) Kernels:

(1) Well dried, or, very well dried when specified in connection with the grade.

(2) Free from damage by:

(i) Minor mold;

(ii) Immature kernels;

(iii) Kernel spots; and,

(iv) Other interal (kernel) defects.

(3) Free from serious damage by:

(i) Minor insect or vertebrate injury;

(ii) Insect damage;

(iii) Mold;

(iv) Rancidity;

(v) Decay; and,

(vi) Other internal (kernel) defects.

(d) The nuts are of a size not less than 26/64 inch in diameter as measured by a round hole screen.

(e) For tolerances see section 51.2542.

[51 FR 27814, Aug. 4, 1986; 51 FR 28802, Aug. 12, 1986, as amended at 57 FR 1636, Jan. 15, 1992]

§ 51.2542 Tolerances.

(a) In order to allow for variations incident to proper grading and handling, the tolerances in Tables I, II, III and paragraph (b) of this section are provided.

TABLE I

Factor	U.S. fancy	U.S. No. 1	U.S. No. 2	U.S. No. 3
External (shell) defects (tolerances by weight)	Percent	Percent	Percent	Percent
(a) Non-split and not split on suture	2	3	6	10
(1) Non-split included in (a)	1	2	4	4
(b) Adhering hull material	1	1	2	2
(c) Light stained	7	12	20	35
(1) Dark stained, included in (c)	2	3	4	6
(d) Damage by other means	1	1	1	2
(e) Less than 26/64 inch in diameter:				
(1) Small size	5	5	5	5
(2) Medium, Large, Extra Large sizes	1	1	1	1

TABLE II

Factor	U.S. fancy	U.S. No. 1	U.S. No. 2	U.S. No. 3
Internal (kernel) defects (tolerances by weight)	Percent	Percent	Percent	Percent
(a) Damage	3	6	8	8
(b) Serious Damage	3	4	5	5
(1) Insect damage, included in (b)	1	2	3	3

TABLE II—Continued

Factor	U.S. fancy	U.S. No. 1	U.S. No. 2	U.S. No. 3
Internal (kernel) defects (tolerances by weight)	Percent	Percent	Percent	Percent
Total internal defects shall not exceed	5	9	10	10

TABLE III

Factor	U.S. fancy	U.S. No. 1	U.S. No. 2	U.S. No. 3
Other defects (tolerances by weight)	Percent	Percent	Percent	Percent
(a) Shell pieces and blanks	1	1	2	2
(b) Foreign material (no glass, metal, or live insects shall be permitted	.25	.25	.50	.50
(c) Particles and dust	.25	.25	.25	.25

(b) No lot shall contain more than 4 percent loose kernels, by weight.

[51 FR 27814, Aug. 4, 1986, as amended at 57 FR 1636, Jan. 15, 1992]

§ 51.2543 Application of tolerances.

The tolerances for the grades apply to the entire lot and shall be based on a composite sample drawn from containers throughout the lot. Any container or group of containers which have nuts obviously different in quality or size from those in the majority of containers shall be considered a separate lot and shall be sampled separately.

§ 51.2544 Size.

Nuts may be considered as meeting a size designation specified in Table IV or a range in number of nuts per ounce, provided, the weight of 10 percent, by count, of the largest nuts in a sample does not exceed 1.70 times the weight of 10 percent, by count, of the smallest and the average number of nuts per ounce is not more than one-half nut above or below the extremes of the range specified.

Table IV

Size designation	Average number of nuts per ounce[1]
Extra Large	20 or less.
Large	21 to 25.
Medium	26 to 30.
Small	31 or more.

[1] Before roasting.

§ 51.2545 Definitions.

(a) *Well dried* means the kernel is firm and crisp.

(b) *Very well dried* means the kernel is firm and crisp and the average moisture content of the lot does not exceed 7.00 percent or is specified. (See § 51.2546).

(c) *Loose kernels* means edible kernels or kernel portions which are out of the shell and which cannot be considered particles and dust.

(d) *External (shell) defects* means any blemish affecting the hard covering around the kernel. Such defects include, but are not limited to, non-split shells, shells not split on suture, adhering hull material, light stained, or dark stained.

(1) *Damage* by external (shell) defects means any specific defect described in paragraph (d)(1) (i) through (v) of this section, or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance or the edible or marketing quality of the individual shell or of the lot (For tolerances see § 51.2542, Table I).

(i) *Non split shells* when shells are not opened or are partially opened and will not allow an 18/1000 (.018) inch thick by ¼ (.25) inch wide gauge to slip into the opening.

(ii) *Not-split on suture* when shells are split other than on the suture and will allow an 18/1000 (.018) inch thick by ¼ (.25) inch wide gauge to slip into the opening.

(iii) *Adhering hull material* when an aggregate amount covers more than one-sixteenth of the total shell surface, or when readily noticeable on dyed shells.

(iv) *Light stained* on raw or roasted nuts, when an aggregate amount of yellow to light brown or light gray discoloration is noticeably contrasting with

the predominate color of the shell and affects more than one-fourth of the total shell surface or, on dyed nuts, when readily noticeable.

(v) *Dark stained* on raw or roasted nuts, when an aggregate amount of dark brown, dark gray or black discoloration affects more than one-eighth of the total shell surface, or, on dyed nuts, when readily noticeable.

(e) *Internal (kernel) defects* means any blemish affecting the kernel. Such defects include, but are not limited to evidence of insects, immature kernels, rancid kernels, mold, or decay.

(1) *Damage* by internal (kernel) defects means any specific defect described in paragraphs (e)(1) (i) through (iii) of this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance or the edible or marketing quality of the individual kernel or of the lot (For tolerances see § 51.2542, Table II).

(i) *Minor white or gray mold* when not readily noticeable on the kernel and which can be easily rubbed off with the fingers.

(ii) *Immature kernels* when they are excessively thin or when a kernel fills less than three-fourths, but not less than one-half the shell cavity.

(iii) *Kernel spots* when dark brown or dark gray and aggregating more than one-eighth of the surface of the kernel.

(2) *Serious damage* by internal (kernel) defects means any specific defect described in paragraphs (e)(2) (i) through (v) of this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance or the edible or the marketing quality of the individual kernel or of the lot. (For tolerances see § 51.2542, Table II).

(i) *Minor insect or vertebrate injury* when the kernel shows conspicuous evidence of feeding.

(ii) *Insect damage* when an insect, insect fragment, web or frass is attached to the kernel. No live insects shall be permitted.

(iii) *Mold* when any type is readily visible on the shell or kernel.

(iv) *Rancidity* means the kernel is distinctly rancid to taste. Staleness of flavor shall not be classed as rancidity.

(v) *Decay* when any portion of the kernel is decomposed.

(f) *Other defects* means defects which cannot be considered internal defects or external defects. Such defects include, but are not limited to shell pieces, blanks, foreign material or particles and dust. The following shall be considered other defects. (For tolerances see § 51.2542, Table III).

(1) *Shell pieces* means half shells or pieces of shell which are loose in the sample.

(2) *Blank* means a split or a non-split shell not containing a kernel or containing a kernel that fills less than one-half the shell cavity.

(3) *Foreign material* means leaves, sticks, loose hulls or hull pieces, dirt, rocks, insects or insect fragments not attached to nuts, or any substance other than pistachio shells or kernels. Glass, metal or live insects shall not be permitted.

(4) *Particles and dust* means pieces of nut kernels which will pass through a 5⁄64 inch round opening.

§ 51.2546 Average mositure content determination.

(a) Determining average moisture content of the lot is not a requirement of the grades, except when nuts are specified as ''very well dried.'' It may be carried out upon request in connection with grade analysis or as a separate determination.

(b) Nuts shall be obtained from a randomly drawn composite sample and only kernels shall be used for analysis. Shells and all non-kernel material shall be removed immediately before anaylsis. Official certification shall be based on the air-oven method or other officially approved methods or devices. Results obtained by methods or devices not officially approved may be reported and shall include a description of the method or device and the owner of any equipment used.

§ 51.2547 Metric Conversion Table.

Inches	Millimeters
5/64	1.98
18/1000	0.46

Inches	Millimeters
1/4	6.35
26/64	10.32

Ounces	Grams
1	28.35
2	56.70

[57 FR 1636, Jan. 15, 1992]

Subpart—United States Standards for Grades of Shelled Pistachio Nuts

SOURCE: 55 FR 28747, July 13, 1990, unless otherwise noted.

§ 51.2555 General.

(a) Compliance with the provisions of these standards shall not excuse failure to comply with provisions of applicable Federal or State laws.

(b) These standards are applicable to raw, roasted, or salted pistachio kernels; or any combination thereof. However, nuts of obviously dissimilar forms shall not be commingled.

§ 51.2556 Grades.

(a) ''U.S. Fancy,'' ''U.S. No. 1,'' and ''U.S. No. 2'' consist of pistachio kernels which meet the following basic requirements:

(1) Well dried, or very well dried when specified in connection with the grade.

(2) Free from:

(i) Foreign material, including in-shell nuts, shells, or shell fragments.

(3) Free from damage by:

(i) Minor mold;

(ii) Immature kernels;

(iii) Spotting; and,

(iv) Other defects.

(4) Free from serious damage by:

(i) Mold;

(ii) Minor insect or vertebrate injury;

(iii) Insect damage;

(iv) Rancidity;

(v) Decay; and,

(vi) Other defects.

(5) Unless otherwise specified, kernels shall meet the size classification of Whole Kernels (See § 51.2559).

§ 51.2557 Tolerances.

(a) In order to allow for variations incident to proper grading and handling, the tolerances, by weight, in Table I are provided.

TABLE I

Factors (Tolerances by weight)	Percent		
	U.S. fancy	U.S. No. 1	U.S. No. 2
(a) Damage	2.0	2.5	3.0
(b) Serious Damage	1.5	2.0	2.5
(1) Insect Damage (included in [b])	.3	.4	.5
(c) Foreign Material	.03	.05	.1

[55 FR 28747, July 13, 1990; 55 FR 29938, July 23, 1990]

§ 51.2558 Application of tolerances.

The tolerances for the grades apply to the entire lot and shall be based on a composite sample representative of the lot. Any container or group of containers which have kernels obviously different in quality or size from those in the majority of containers shall be considered a separate lot and shall be sampled separately.

§ 51.2559 Size classifications.

(a) The size of pistachio kernels may be specified in connection with the grade in accordance with one of the following size classifications.

(1) Whole Kernels: 80 percent or more by weight shall be whole kernels and not more than 5 percent of the total sample shall pass through a 16/64 inch round opening, including not more than 1 percent of the total sample shall pass through a 5/64 inch round opening.

(2) Whole and Pieces: 40 percent or more by weight shall be whole kernels and not more than 15 percent of the total sample shall pass through a 16/64 inch round opening, including not more than 2 percent of the total sample shall pass through a 5/64 inch round opening.

(3) Large Pieces: Portions of kernels of which not more than 10 percent will remain on a 24/64 inch round opening, provided that not more than 20 percent of the total sample shall pass through a 16/64 inch round opening, including not more than 2 percent of the total sample shall pass through a 5/64 inch round opening. Not more than 25 percent of

the total sample shall be whole kernels.

(4) Small Pieces: Portions of kernels of which not more than 10 percent will remain on a 16/64 inch round opening, provided that not more than 3 percent of the total sample shall pass through a 5/64 inch round opening. Not more than 3 percent of the total sample shall be whole kernels.

(5) Mixed sizes: Means a mixture of any combination of whole kernels or pieces. The percentage of whole kernels and/or pieces may be specified. Not more than 5 percent of the total sample shall pass through a 5/64 inch round opening.

[55 FR 28747, July 13, 1990; 55 FR 30796, July 25, 1990]

§ 51.2560 Definitions.

(a) *Well dried* means the kernel is firm and crisp.

(b) *Very well dried* means the kernel is firm and crisp and the average moisture content of the lot does not exceed 7 percent of lower levels, if specified (See § 51.2561).

(c) *Foreign material* means leaves, sticks, in-shell nuts, shells or pieces of shells, dirt, or rocks, or any other substance other than pistachio kernels. No allowable tolerances for metal or glass.

(d) *Whole kernel* means ¾ of a kernel or more.

(e) *Pieces* means less than ¾ of a kernel.

(f) *Damage* means any specific defect described in paragraph (f) (1) through (3) of this section or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance or the edible or marketing quality of the individual kernel or of the lot. (For tolerances, see § 51.2557, Table I.)

(1) *Minor white or gray mold* is mold that is not readily noticeable on the kernel and which can be easily rubbed off with the fingers.

(2) *Immature kernels* are excessively thin kernels.

(3) *Kernel spotting* refers to dark brown or dark gray spots aggregating more than one-eighth of the surface of the kernel.

(g) *Serious damage* means any specific defect described in paragraph g (1) through (5) of this section, or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance or the edible or marketing quality of the individual kernel or of the lot. (For tolerances see § 51.2557 Table I.)

(1) *Mold* which is readily visible on the kernel.

(2) *Minor insect or vertebrate injury* means the kernel shows conspicuous evidence of feeding on the kernel.

(3) *Insect damage* is an insect, insect fragment, web, or frass attached to the kernel. No live insects shall be permitted.

(4) *Rancidity* means the kernel is distinctly rancid to taste. Staleness of flavor shall not be classed as rancidity.

(5) *Decay* means any portion of the kernel is decomposed.

§ 51.2561 Average moisture content.

(a) Determining average moisture content of the lot is not a requirement of the grades, except when kernels are specified as ''very well dried.'' It may be carried out upon request in connection with grade analysis or as a separate determination.

(b) Kernels shall be obtained from a randomly drawn composite sample. Official certification shall be based on the air-oven method or other officially approved methods or devices. Results obtained by methods or devices not officially approved may be reported and shall include a description of the method or device and owner of any equipment used.

Subpart—United States Standards for Grades for Sweet Cherries[1]

SOURCE: 36 FR 8502, May 7, 1971, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act or with applicable State laws and regulations.

GRADES

§ 51.2646 U.S. No. 1.

''U.S. No. 1'' consists of sweet cherries which meet the following requirements:

(a) Similar varietal characteristics;

(b) Mature;

(c) Fairly well colored;

(d) Well formed; and

(e) Clean.

(f) Free from:

(1) Decay;

(2) Insect larvae or holes caused by them;

(3) Soft, overripe or shriveled;

(4) Undeveloped doubles; and,

(5) Sunscald.

(g) Free from damage by any other cause. (See § 51.2655.)

(h) *Size.* Unless otherwise specified, the minimum diameter of each cherry shall be not less than three-fourths inch. The maximum diameter of the cherries in any lot may be specified in accordance with the facts.

(i) For tolerances see § 51.2648.

§ 51.2647 U.S. Commercial.

''U.S. Commercial'' consists of sweet cherries which meet the requirements for the U.S. No. 1 grade except for minimum diameter and except for increased tolerances.

(a) *Size.* Unless otherwise specified, the diameter of each cherry shall be not less than five-eighths inch. The maximum diameter of the cherries in any lot may be specified in accordance with the facts.

(b) For tolerances see § 51.2648.

TOLERANCES.

§ 51.2648 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

(a) *For defects at shipping point*[2]—(1) *U.S. No. 1.* 8 percent for cherries which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for cherries which are affected by decay.

(2) *U.S. Commercial.* 16 percent for cherries which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for cherries affected by decay.

(b) *For defects en route or at destination*—(1) *U.S. No. 1.* 12 percent for cherries in any lot which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for cherries which fail to meet the requirements for this grade because of permanent defects; or,

(ii) 6 percent for cherries which are seriously damaged, including therein not more than 4 percent for cherries which are seriously damaged by permanent defects and not more than 2 percent for cherries which are affected by decay.

(2) *U.S. Commercial.* 24 percent for cherries in any lot which fail to meet the requirements for this grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 16 percent for cherries which fail to meet the requirements for this grade because of permanent defects; or,

(ii) 6 percent for cherries which are seriously damaged, including therein not more than 4 percent for cherries which are seriously damaged by permanent defects and not more than 2 percent for cherries which are affected by decay.

(c) *For off-size.* 5 percent for cherries which fail to meet the specified minimum diameter and 10 percent for cherries that fail to meet any specified maximum diameter.

[2] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

APPLICATION OF TOLERANCES

§ 51.2649 Application of tolerances.

Individual samples shall have not more than double the tolerances specified, except that at least two defective and two off-size specimens may be permitted in any sample: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade.

DEFINITIONS

§ 51.2650 Similar varietal characteristics.

Similar varietal characteristics means that the cherries in any container are similar in color and shape.

§ 51.2651 Mature.

Mature means that the cherries have reached the stage of growth which will insure the proper completion of the ripening process.

§ 51.2652 Fairly well colored.

Fairly well colored means that at least 95 percent of the surface of the cherry shows characteristic color for mature cherries of the variety.

§ 51.2653 Well formed.

Well formed means that the cherry has the normal shape characteristic of the variety, except that mature well developed doubles shall be considered well formed when each of the halves is approximately evenly formed.

§ 51.2654 Clean.

Clean means that the cherries are practically free from dirt, dust, spray residue, or other foreign material.

§ 51.2655 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit. The following specific defects shall be considered as damage:

(a) Cracks within the stem cavity when deep or not well healed, or when the appearance is affected to a greater extent than that of a cherry which has a superficial well healed crack one-sixteenth inch in width extending one-half the greatest circumference of the stem cavity;

(b) Cracks outside of the stem cavity when deep or not well healed, or when the crack has weakened the cherry to the extent that it is likely to split or break in the process of proper grading, packing, and handling, or when materially affecting the appearance;

(c) Hail injury when deep or not well healed, or when the aggregate area exceeds the area of a circle three-sixteenths inch in diameter;

(d) Insects when scale or more than one scale mark is present, or when the appearance is materially affected by any insect;

(e) Limbrubs when affecting the appearance of the cherry to a greater extent than the amount of scarring permitted;

(f) Pulled stems when the skin or flesh is torn, or when the cherry is leaking;

(g) Russeting when affecting the appearance of the cherry to a greater extent than the amount of scarring permitted;

(h) Scars when excessively deep or rough or dark colored and the aggregate area exceeds the area of a circle three-sixteenths inch in diameter, or when smooth or fairly smooth, light colored and superficial and the aggregate area exceeds the area of a circle one-fourth inch in diameter;

(i) Skin breaks when not well healed or when the appearance of the cherry is materially affected; and,

(j) Sutures when excessively deep or when affecting the shape of the cherry to the extent that it is not well formed.

§ 51.2656 Diameter.

Diameter means the greatest dimension measured at right angles to a line from the stem to the blossom end of the cherry.

§ 51.2657 Serious damage.

Serious damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detracts from the appearance or the edible or marketing quality of

the fruit. The following specific defects shall be considered as serious damage:

(a) Decay;

(b) Insect larvae or holes caused by them;

(c) Skin breaks which are not well healed;

(d) Cracks which are not well healed; and,

(e) Pulled stems with skin or flesh of cherry torn or which causes the cherry to leak.

[36 FR 8502, May 5, 1971; 36 FR 9061, May 19, 1971. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.2658 Permanent defects.

Permanent defects means defects which are not subject to change during shipping or storage; including, but not limited to factors of shape, scarring, skin breaks, injury caused by hail or insects, and mechanical injury which is so located as to indicate that it occurred prior to shipment.

§ 51.2659 Condition defects.

Condition defects means defects which may develop or change during shipment or storage; including, but not limited to decayed or soft cherries and such factors as pitting, shriveling, sunken areas, brown discoloration and bruising which is so located as to indicate that it occurred after packing.

METRIC CONVERSION TABLE

§ 51.2660 Metric conversion table.

Inches	Millimeters (mm)
8/64 equals	3.2
16/64 equals	6.4
24/64 equals	9.5
32/64 equals	12.7
40/64 equals	15.9
48/64 equals	19.1
51/64 equals	20.2
52/64 equals	20.6
54/64 equals	21.4
56/64 equals	22.2
1 equals	25.4
1 8/64 equals	28.6
1 16/64 equals	31.8
1 24/64 equals	34.9

Subpart—United States Standards for Shelled Runner Type Peanuts

SOURCE: 21 FR 4850, June 30, 1956, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.2710 U.S. No. 1 Runner.

''U.S. No. 1 Runner'' consists of shelled Runner type peanut kernels of similar varietal characteristics which are whole and free from foreign material, damage and minor defects, and which will not pass through a screen having 16/64 × 3/4 inch openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 1 percent for other varieties of peanuts;

(2) 3 percent for sound peanuts which are split or broken;

(3) 1.5 percent for damaged or unshelled peanuts;

(4) 0.5 percent for minor defects: *Provided*, That in addition, any unused part of the tolerance for damaged or unshelled peanuts shall be allowed for minor defects;

(5) 0.1 percent for foreign material; and,

(6) 3 percent for sound whole peanuts which will pass through the prescribed screen.

[21 FR 4850, June 30, 1956, as amended at 21 FR 5669, July 28, 1956. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.2711 U.S. Runner Splits.

''U.S. Runner Splits'' consists of shelled Runner type peanut kernels of similar varietal characteristics which are split or broken, but which are free from foreign material, damage and minor defects, and which will not pass through a screen having 17/64 inch round openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 2 percent for other varieties of peanuts;

(2) 2 percent for damaged or unshelled peanuts and minor defects;

(3) 0.2 percent for foreign material;

(4) 2 percent for sound portions of peanuts which will pass through the prescribed screen; and,

(5) 4 percent for sound whole peanuts.

§ 51.2712 U.S. No. 2 Runner.

''U.S. No. 2 Runner'' consists of shelled Runner type peanut kernels of similar varietal characteristics which may be split or broken, but which are free from foreign material, damage and minor defects, and which will not pass through a screen having 17/64 inch round openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 2 percent for other varieties of peanuts;

(2) 2.5 percent for damaged or unshelled peanuts and minor defects;

(3) 0.2 percent for foreign material; and,

(4) 6 percent for sound peanuts and portions of peanuts which will pass through the prescribed screen.

APPLICATION OF TOLERANCES

§ 51.2713 Application of tolerances.

The tolerances provided in these standards are on a lot basis and shall be applied to a composite sample representative of the lot. However, any container or group of containers in which the peanuts are obviously of a quality materially different from that in the majority of containers shall be considered a separate lot, and shall be sampled separately.

DEFINITIONS

§ 51.2714 Similar varietal characteristics.

Similar varietal characteristics means that the peanut kernels in the lot are not of distinctly different varieties. For example, Spanish type shall not be mixed with Runners.

§ 51.2715 Whole.

Whole means that the peanut kernel is not split or broken.

§ 51.2716 Split.

Split means the separated half of a peanut kernel.

§ 51.2717 Broken.

Broken means that more than one-fourth of the peanut kernel is broken off.

§ 51.2718 Foreign material.

Foreign material means pieces or loose particles of any substance other than peanut kernels or skins.

§ 51.2719 Unshelled.

Unshelled means a peanut kernel with part or all of the hull (shell) attached.

§ 51.2720 Minor defects.

Minor defects means that the peanut kernel is not damaged but is affected by one or more of the following:

(a) Skin discoloration which is dark brown, dark gray, dark blue or black and covers more than one-fourth of the surface;

(b) Flesh discoloration which is darker than a light yellow color or consists of more than a slight yellow pitting of the flesh;

(c) Sprout extending more than one-eighth of an inch from the tip of the kernel; and,

(d) Dirt when the surface of the kernel is distinctly dirty, and its appearance is materially affected.

§ 51.2721 Damage.

Damage means that the peanut kernel is affected by one or more of the following:

(a) Rancidity or decay;

(b) Mold;

(c) Insects, worm cuts, web or frass;

(d) Freezing injury causing hard, translucent or discolored flesh; and

(e) Dirt when the surface of the kernel is heavily smeared, thickly flecked or coated with dirt, seriously affecting its appearance.

Subpart—United States Standards for Grades of Shelled Spanish Type Peanuts

SOURCE: 30 FR 7595, June 11, 1965, unless otherwise noted. Redesignated at 42 FR 32514,

June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.2730 U.S. No. 1 Spanish.

''U.S. No. 1 Spanish'' consists of shelled Spanish type peanut kernels which are whole and free from foreign material, damage and minor defects, and which will not pass through a screen having 15/64 × 3/4 inch openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 1 percent for other types of peanuts;

(2) 3 percent for sound peanuts which are split or broken;

(3) 1.5 percent for damaged or unshelled peanuts;

(4) 0.5 percent for minor defects: *Provided*, That in addition, any unused part of the tolerance for damaged or unshelled peanuts shall be allowed for minor defects;

(5) 0.1 percent for foreign material; and,

(6) 2 percent for sound whole peanuts which will pass through the prescribed screen.

§ 51.2731 U.S. Spanish Splits.

''U.S. Spanish Splits'' consists of shelled Spanish type peanut kernels which are split or broken, but which are free from foreign material, damage and minor defects, and which will not pass through a screen having 16/64 inch round openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 2 percent for other types of peanuts;

(2) 2 percent for damaged or unshelled peanuts and minor defects;

(3) 0.2 percent for foreign material;

(4) 2 percent for sound portions of peanuts which will pass through the prescribed screen; and,

(5) 4 percent for sound whole kernels.

§ 51.2732 U.S. No. 2 Spanish.

''U.S. No. 2 Spanish'' consists of shelled Spanish type peanut kernels which may be split or broken, but which are free from foreign material, damage, and minor defects, and which will not pass through a screen having 16/64 inch round openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 2 percent for other types of peanuts;

(2) 2.5 percent for damaged or unshelled peanuts and minor defects;

(3) 0.2 percent for foreign material; and,

(4) 6 percent for sound peanuts and portions of peanuts which will pass through the prescribed screen.

APPLICATION OF TOLERANCES

§ 51.2733 Application of tolerances.

The tolerances provided in these standards are on a lot basis and shall be applied to a composite sample representative of the lot. However, any container or group of containers in which the peanuts are obviously of a quality materially different from that in the majority of containers shall be considered a separate lot, and shall be sampled and graded separately.

DEFINITIONS

§ 51.2734 Spanish type.

Spanish type means peanuts of varieties which belong to the Spanish classification group and which are free from kernels of Runner, Virginia, or other types.

§ 51.2735 Whole.

Whole means that the peanut kernel is not split or broken.

§ 51.2736 Split.

Split means the separated half of a peanut kernel.

§ 51.2737 Broken.

Broken means that more than one-fourth of the peanut kernel is broken off.

§ 51.2738 Foreign material.

Foreign material means pieces or loose particles of any substance other than peanut kernels or skins.

§ 51.2739 Damage.

Damage means any specific defect described in this section; or any other defect, or any combination of defects which materially detracts from the edible quality of the peanut. The following specific defects shall be considered as damage:

(a) Rancidity or decay;

(b) Mold;

(c) Insects, worm cuts, web or frass;

(d) Freezing injury causing hard, translucent, or discolored flesh; and,

(e) Dirt when the surface of the kernel is heavily smeared, thickly flecked or coated with dirt, seriously affecting its appearance.

§ 51.2740 Minor defects.

Minor defects means that the peanut kernel is not damaged but is affected by one or more of the following:

(a) Skin discoloration which is dark brown, dark gray, dark blue or black and covers more than one-fourth of the surface;

(b) Flesh discoloration which is darker than a light yellow color or consists of more than a slight yellow pitting of the flesh;

(c) Sprout extending more than one-eighth of an inch from the tip of the kernel; and,

(d) Dirt when the surface of the kernel is distinctly dirty, and its appearance is materially affected.

§ 51.2741 Unshelled.

Unshelled means a peanut kernel with part or all of the hull (shell) attached.

Subpart—United States Standards for Shelled Virginia Type Peanuts

SOURCE: 24 FR 6182, Aug. 1, 1959; 24 FR 6671, Aug. 18, 1959, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.2750 U.S. Extra Large Virginia.

''U.S. Extra Large Virginia'' consists of shelled Virginia type peanut kernels of similar varietal characteristics which are whole and free from foreign material, damage and minor defects, and which will not pass through a screen having $^{20}/_{64} \times 1$ inch openings. Unless otherwise specified, the peanuts in any lot shall average not more than 512 per pound.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 0.75 percent for other varieties of peanuts;

(2) 3 percent for sound peanuts which are split or broken;

(3) 1 percent for damaged or unshelled peanuts;

(4) 0.75 percent for minor defects: *Provided*, That in addition, any unused part of the tolerance for damaged or unshelled peanuts shall be allowed for minor defects;

(5) 0.1 percent for foreign material; and,

(6) 3 percent for sound, whole peanuts which will pass through the prescribed screen.

§ 51.2751 U.S. Medium Virginia.

''U.S. Medium Virginia'' consists of shelled Virginia type peanut kernels of similar varietal characteristics which are whole and free from foreign material, damage and minor defects, and which will not pass through a screen having $^{18}/_{64} \times 1$ inch openings. Unless otherwise specified, the peanuts in any lot shall average not more than 640 per pound.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 1 percent for other varieties of peanuts;

(2) 3 percent for sound peanuts which are split or broken;

(3) 1.25 percent for damaged or unshelled peanuts;

(4) 0.75 percent for minor defects: *Provided*, That in addition, any unused part of the tolerance for damaged or unshelled peanuts shall be allowed for minor defects;

(5) 0.1 percent for foreign material; and,

(6) 3 percent for sound, whole peanuts which will pass through the prescribed screen.

§ 51.2752 U.S. No. 1 Virginia.

''U.S. No. 1 Virginia'' consists of shelled Virginia type peanut kernels of similar varietal characteristics which are whole and free from foreign material, damage and minor defects, and which will not pass through a screen having 15⁄64 × 1 inch openings. Unless otherwise specified, the peanuts in any lot shall average not more than 864 per pound.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances by weight, shall be permitted:

(1) 1 percent for other varieties of peanuts;

(2) 3 percent for sound peanuts which are split or broken;

(3) 1.25 percent for damaged or unshelled peanuts;

(4) 0.75 percent for minor defects: *Provided,* That in addition, any unused part of the tolerance for damaged or unshelled peanuts shall be allowed for minor defects;

(5) 0.1 percent for foreign material; and,

(6) 3 percent for sound, whole peanuts which will pass through the prescribed screen.

[24 FR 6671, Aug. 18, 1959. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.2753 U.S. Virginia Splits.

''U.S. Virginia Splits'' consists of shelled Virginia type peanut kernels of similar varietal characteristics which are free from foreign material, damage and minor defects, and which will not pass through a screen having 20⁄64 inch round openings. Not less than 90 percent, by weight, shall be splits.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 2 percent for other varieties of peanuts;

(2) 2 percent for damaged or unshelled peanuts and minor defects;

(3) 0.2 percent for foreign materials; and,

(4) 3 percent for sound peanuts and portions of peanuts which will pass through the prescribed screen.

[24 FR 6671, Aug. 18, 1959. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.2754 U.S. No. 2 Virginia.

''U.S. No. 2 Virginia'' consists of shelled Virginia type peanut kernels of similar varietal characteristics which may be split or broken, but which are free from foreign material, damage and minor defects, and which will not pass through a screen having 17⁄64 inch round openings.

(a) In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, shall be permitted:

(1) 2 percent for other varieties of peanuts;

(2) 2.5 percent for damaged or unshelled peanuts and minor defects;

(3) 0.2 percent for foreign material; and,

(4) 6 percent for sound peanuts and portions of peanuts which will pass through the prescribed screen.

APPLICATION OF TOLERANCES

§ 51.2755 Application of tolerances.

The tolerances provided in these standards are on a lot basis and shall be applied to a composite sample representative of the lot. However, any container or group of containers in which the peanuts are obviously of a quality materially different from that in the majority of containers shall be considered a separate lot, and shall be sampled separately.

DEFINITIONS

§ 51.2756 Similar varietal characteristics.

Similar varietal characteristics means that the peanut kernels in the lot are not of distinctly different varieties. For example, Spanish type shall not be mixed with Virginia type.

§ 51.2757 Whole.

Whole means that the peanut kernel is not split or broken.

§ 51.2758 Split.

Split means the separated half of a peanut kernel.

§ 51.2759 Broken.

Broken means that more than one-fourth of the peanut kernel is broken off.

§ 51.2760 Foreign material.

Foreign material means pieces or loose particles of any substance other than peanut kernels or skins.

§ 51.2761 Unshelled.

Unshelled means a peanut kernel with part or all of the hull (shell) attached.

§ 51.2762 Minor defects.

Minor defects means that the peanut kernel is not damaged but is affected by one or more of the following:

(a) Skin discoloration which is dark brown, dark gray, dark blue or black and covers more than one-fourth of the surface;

(b) Flesh discoloration which is darker than a light yellow color or consists of more than a slight yellow pitting of the flesh;

(c) Sprout extending more than one-eighth of an inch from the tip of the kernel; and,

(d) Dirt when the surface of the kernel is distinctly dirty, and its appearance is materially affected.

§ 51.2763 Damage.

Damage means that the peanut kernel is affected by one or more of the following:

(a) Rancidity or decay;

(b) Mold;

(c) Insects, worm cuts, web or frass;

(d) Freezing injury causing hard, translucent or discolored flesh; and,

(e) Dirt when the surface of the kernel is heavily smeared, thickly flecked or coated with dirt, seriously affecting its appearance.

Subpart—United States Standards for Grades of Onions (Other Than Bermuda-Granex-Grano and Creole Types)

SOURCE: 60 FR 46977, Sept. 8, 1995, unless otherwise noted.

GRADES

§ 51.2830 U.S. No. 1.

U.S. No. 1 consists of onions which meet the following requirements:

(a) Basic requirements:

(1) Similar varietal characteristics;

(2) Mature;

(3) Fairly firm; and,

(4) Fairly well shaped.

(b) Free from:

(1) Decay;

(2) Wet sunscald;

(3) Doubles;

(4) Bottlenecks; and,

(5) Scallions.

(c) Free from damage caused by:

(1) Seedstems;

(2) Splits;

(3) Tops;

(4) Roots;

(5) Dry sunken areas;

(6) Sunburn;

(7) Sprouts;

(8) Freezing;

(9) Peeling;

(10) Cracked fleshy scales;

(11) Watery scales;

(12) Dirt or staining;

(13) Foreign matter;

(14) Mechanical;

(15) Translucent scales;

(16) Disease;

(17) Insects; and,

(18) Other means.

(d) For tolerances see § 51.2837.

(e) Size. Unless otherwise specified the diameter shall be not less than 1½ inches, and yellow, brown, or red onions shall have 40 percent or more, and white onions shall have 30 percent or more, by weight, of the onions in any lot 2 inches or larger in diameter.

(f) When a percentage of the onions is specified to be of any certain size or larger, no part of any tolerance shall be allowed to reduce the specified percentage, but individual packages in a lot may have as much as 25 percentage points less than the percentage specified, except that individual packages containing 10 pounds or less shall have no requirements as to percentage of a certain size or larger: *Provided*, that any lot, regardless of package size,

shall average within the percentage specified. (See §§51.2836 and 51.2837)[1]

§51.2831 U.S. Export No. 1.

U.S. Export No. 1 consists of onions which meet the following requirements:

(a) Basic requirements:
(1) Similar varietal characteristics;
(2) Mature;
(3) Dormant;
(4) Fairly firm; and,
(5) Fairly well shaped.
(b) Free from:
(1) Decay;
(2) Wet sunscald;
(3) Doubles;
(4) Bottlenecks; and,
(5) Scallions.
(c) Free from damage caused by:
(1) Seedstems;
(2) Splits;
(3) Tops;
(4) Roots;
(5) Dry sunken areas;
(6) Sunburn;
(7) Sprouts;
(8) Freezing;
(9) Peeling;
(10) Cracked fleshy scales;
(11) Watery scales;
(12) Dirt or staining;
(13) Foreign matter;
(14) Mechanical;
(15) Translucent scales;
(16) Disease;
(17) Insects; and,
(18) Other means.
(d) Unless otherwise specified onions are packed in accordance with Export Packing Requirements set forth in §51.2840. (See §51.2837.)

§51.2832 U.S. Commercial.

U.S. Commercial consists of onions which meet the following requirements:

(a) Basic requirements:
(1) Similar varietal characteristics;
(2) Mature;
(3) Not soft or spongy; and,
(4) Not badly misshapen.
(b) Free from:
(1) Decay;
(2) Wet sunscald;
(3) Doubles;
(4) Bottlenecks; and,
(5) Scallions.
(c) Free from damage caused by:
(1) Seedstems;
(2) Tops;
(3) Roots;
(4) Dry sunken areas;
(5) Sunburn;
(6) Sprouts;
(7) Freezing;
(8) Cracked fleshy scales;
(9) Watery scales;
(10) Mechanical;
(11) Translucent scales;
(12) Disease;
(13) Insects; and,
(14) Other means.
(d) Free from serious damage caused by:
(1) Staining;
(2) Dirt; and,
(3) Other foreign matter.
(e) For tolerances see §51.2837.
(f) Size. Unless otherwise specified, the diameter shall be not less than 1½ inches. (See §§51.2836 and 51.2837.)

§51.2833 U.S. No. 1 Boilers.

U.S. No. 1 Boilers consists of onions which meet all the requirements for the U.S. No. 1 grade except for size. (See §51.2830.) Size: The diameter of onions of this grade shall be not less than 1 inch nor more than 1⅞ inches. (See §51.2837.)

§51.2834 U.S. No. 1 Picklers.

U.S. No. 1 Picklers consists of onions which meet all the requirements for the U.S. No. 1 grade except for size. (See §51.2830.) Size: The maximum diameter of onions of this grade shall be not more than 1 inch. (See §51.2837.)

§51.2835 U.S. No. 2.

U.S. No. 2 consists of onions which meet the following requirements:

(a) Basic requirements:
(1) One type;
(2) Mature; and,
(3) Not soft or spongy.
(b) Free from:
(1) Decay;
(2) Wet sunscald; and,
(3) Scallions.

[1] Any lot of onions quoted as being of size smaller than 1½ inches minimum, such as ''U.S. No. 1, 1¼ inches min.'' is not required to meet the percentages which shall be 2 inches or larger as specified in the U.S. No. 1 grade.

(c) Free from serious damage caused by:

(1) Watery scales;

(2) Dirt or Staining;

(3) Foreign Matter;

(4) Seedstems;

(5) Sprouts;

(6) Mechanical;

(7) Dry sunken areas;

(8) Disease;

(9) Freezing;

(10) Insects; and,

(11) Other means.

(d) For tolerances see § 51.2837.

(e) Size. Unless otherwise specified, the diameter shall not be less than 1½ inches. (See §§ 51.2836 and 51.2837.)

SIZE CLASSIFICATIONS

§ 51.2836 Size classifications.

The size of onions may be specified in accordance with one of the following classifications.

Size designation	Minimum diameter		Maximum diameter	
	Inches	Millimeters	Inches	Millimeters
Small	1	25.4	2¼	57.2
Repacker/Prepacker [1]	1¾	44.5	3	76.2
Medium	2	50.8	3¼	82.6
Large or Jumbo	3	76.2	([2])	.....
Colossal	3¾	95.3	([2])	.....

[1] In addition to the sizes specified, a lot of onions designated as Repacker or Prepacker shall contain at least 60 percent or more 2 inches or larger in diameter.

[2] No requirement.

TOLERANCES

§ 51.2837 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades the following tolerances, by weight, are provided as specified:

(a) For defects:

(1) *U.S. No. 1, U.S. Export No. 1, U.S. No. 1 Boilers and U.S. No. 1 Picklers grades.*

(i) Not more than 10 percent of the onions in a lot may be damaged by peeling; and,

(ii) Not more than 5 percent of the onions in a lot may be below the remaining requirements of these grades, but not more than two-fifths of this tolerance, or 2 percent, may be allowed for onions which are affected by decay or wet sunscald (see § 51.2839.)

(2) *U.S. Commercial and U.S. No. 2 grades.*

(i) Not more than 5 percent of the onions in a lot may be below the requirements of these grades, but not more than two-fifths of this tolerance, or 2 percent, may be allowed for onions which are affected by decay or wet sunscald. (See § 51.2839.)

(ii) [Reserved]

(b) For off-size:

(1) *U.S. No. 1, U.S. No. 1 Boilers, U.S. Commercial, and U.S. No. 2 grades.* Not more than 5 percent of the onions in a lot may be below the specified minimum size, and not more than 10 percent may be above any specified maximum size. (See § 51.2839.)

(2) *U.S. No. 1 Pickler grade.* Not more than 10 percent of the onions in a lot may be above the maximum size specified for this grade. (See § 51.2839.)

SAMPLES FOR GRADE AND SIZE DETERMINATION

§ 51.2838 Samples for grade and size determination.

Individual samples shall consist of at least 20 pounds for onions packed to meet larger than 2¼ inches maximum diameter. When individual packages contain 20 pounds or more and the onions are packed for Large or Jumbo size or larger the package shall be the sample. When individual packages contain less than 20 pounds, a sufficient number of adjoining packages are opened to provide at least a 20 pound sample, except that for onions packed to meet 2¼ inches maximum diameter or smaller, the sample may consist of either 20 pounds or the individual package.

APPLICATION OF TOLERANCES

§51.2839 Application of tolerances.

Individual samples are subject to the following limitations:

(a) Samples which contain more than 20 pounds shall have not more than one and one half times a specified tolerance of 10 percent or more, and not more than double a specified tolerance of less than 10 percent, except that at least one defective and one off-size onion may be permitted in any sample: *Provided,* that en-route or at destination when onions in containers of 50 pounds or more are packed to a minimum size of 3 inches or larger not more than three onions or more than 4 percent (whichever is the larger amount) may be affected by decay or wet sunscald: *And provided further,* that the averages for the entire lot are within the tolerances specified for the grade; and,

(b) Samples which contain 20 pounds or less shall have not more than double the tolerance specified, except that at least one defective and one off-size onion may be permitted in any sample: *Provided,* that the averages for the entire lot are within the tolerances specified for the grade.

EXPORT PACKING REQUIREMENTS

§51.2840 Export packing requirements.

Onions specified as meeting Export Packing Requirements shall be packed in containers having a net capacity of 25 kilograms (approximately 56 pounds).

DEFINITIONS

§51.2841 Mature.

Mature means well cured. Midseason onions which are not customarily held in storage shall be considered mature when harvested in accordance with good commercial practice at a stage which will not result in the onions becoming soft or spongy.

§51.2842 Dormant.

Dormant means that at least 90 percent of the onions in any lot show no evidence of growth as indicated by distinct elongation of the growing point or distinct yellow or green color in the tip of the growing point.

§51.2843 Fairly firm.

Fairly firm means that the onion may yield slightly to moderate pressure but is not appreciably soft or spongy.

§51.2844 Fairly well shaped.

Fairly well shaped means having the shape characteristic of the variety, but onions may be slightly off-type or slightly misshapen.

§51.2845 Wet sunscald.

Wet sunscald means sunscald which is soft, mushy, sticky or wet.

§51.2846 Doubles.

Doubles means onions which have developed more than one distinct bulb joined only at the base.

§51.2847 Bottlenecks.

Bottlenecks are onions which have abnormally thick necks with only fairly well developed bulbs.

§51.2848 Scallions.

Scallions are onions which have thick necks and relatively small and poorly developed bulbs.

§51.2849 Damage.

Damage means any specific defect described in this section; or any equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the onions. The following specific defects shall be considered as damage:

(a) Seedstems which are tough or woody, or which are more than ¼ inch in diameter;

(b) Splits when onions with two or more hearts are not practically covered by one or more outer scales;

(c) Tops when more than 30 percent of the onions in a lot have tops 3 inches or more in length;

(d) New roots when most roots on an individual onion have grown to a length of 1 inch or more in length;

(e) Dry roots when more than 20 percent of the onions in a lot have practically all roots 2 inches or more in length;

(f) Dry sunken areas when the affected areas exceed the equivalent to that of a circle ½ inch in diameter on an onion 2¾ inches in diameter which does not have the outer papery scale covering the affected areas or when the affected areas exceed the equivalent to that of a circle ¾ inch in diameter on an onion 2¾ inches in diameter which has the outer papery scale covering the affected areas. Correspondingly lesser or greater areas are allowed on smaller or larger onions;

(g) Sunburn when more than 33 percent of the onions in a lot have a medium green color on one-third of the surface;

(h) Sprouts when visible, or when concealed within the dry top and more than ¾ inch in length on an onion 2 inches or larger in diameter, or proportionately shorter on smaller onions;

(i) Peeling when more than one-half of the thin papery skin is missing, leaving the underlying fleshy scale unprotected;

(j) Cracked fleshy scales when one or more of the fleshy scales are cracked;

(k) Watery scales when more than the equivalent of the entire outer fleshy scale is affected by an off-color, watersoaked condition. The off-color must be of some shade of brown or yellow;

(l) Dirt, staining or other foreign matter when more than 20 percent of the onions in a yellow, brown or red lot, or more than 15 percent of the onions in a white lot are appreciably stained. Onions with adhering dirt or other foreign matter shall be judged on the same basis as stained onions;

(m) Mechanical when any cut extends deeper than one fleshy scale, or when any bruise breaks a fleshy scale; and,

(n) Translucent scales when more than the equivalent of two entire outer fleshy scales have a watersoaked condition.

§ 51.2850 Diameter.

Diameter means the greatest dimension measured at right angles to a straight line running from the stem to the root.

§ 51.2851 Badly misshapen.

Badly misshapen means that the onion is so misshapen that its appearance is seriously affected.

§ 51.2852 Serious damage.

Serious damage means any specific defect described in this section; or any equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the onions. The following specific defects shall be considered as serious damage:

(a) Watery scales when more than the equivalent of two entire outer fleshy scales are affected by an off-colored, watersoaked condition. The off-color must be of some shade of brown or yellow;

(b) Dirt, staining or other foreign matter when more than 25 percent of the onions in a lot are badly stained. Onions with adhering dirt or other foreign matter shall be judged on the same basis as stained onions;

(c) Seedstems when more than ½ inch in diameter;

(d) Sprouts when the visible length is more than ½ inch;

(e) Mechanical when any cut extends deeper than two fleshy scales, or when cuts seriously damage the appearance of the onion; and,

(f) Dry sunken areas when extending deeper than one fleshy scale, or when affecting an area equivalent to that of a circle 1 inch in diameter on an onion 2¾ inches in diameter, or correspondingly lesser or greater areas on smaller or larger onions.

§ 51.2853 One type.

One type means that the onions are within the same general color category.

METRIC CONVERSION TABLE

§ 51.2854 Metric conversion table.

Inches	Millimeters (mm)
⅛	3.2
¼	6.4
⅜	9.5
½	12.7
⅝	15.9

Inches	Millimeters (mm)
¾	19.1
⅞	22.2
1	25.4
1¼	31.8
1½	38.1
1¾	44.5
2	50.8
2½	63.5
2¾	69.9
3	76.2
3½	88.9
4	101.6

Subpart—United States Standards for Grades of Apricots

SOURCE: 59 FR 49340, Sept. 28, 1994, unless otherwise noted.

GRADES

§51.2925 U.S. No. 1.

''U.S. No. 1'' shall consist of apricots of one variety which are mature but not soft, overripe, or shriveled and which are well formed, free from decay, cuts, skin breaks, and worm holes and free from damage caused by limbrubs, russeting, growth cracks, dirt, scab, scale, hail, bruises, disease, insects, or mechanical or other means. For tolerances see §51.2928.

§51.2926 U.S. No. 2.

''U.S. No. 2'' shall consist of apricots of one variety which are mature but not soft, overripe or shriveled and which are free from decay, cuts, skin breaks, and worm holes and free from serious damage caused by limbrubs, growth cracks, dirt, scale, hail, bruises, disease, insects, or mechanical or other means. For tolerances see §51.2928.

MARKING AND PACKING REQUIREMENTS

§51.2927 Marking and packing requirements.

The minimum size or numerical count of the apricots in any package shall be plainly labeled, stenciled, or otherwise marked on the package.

(a) *Numerical count.* When the numerical count is used the fruit in any sample shall not vary more than one-fourth inch in diameter. See §51.2928(b) Size for tolerances.

(b) *Minimum size.* ''Minimum size'' refers to the diameter of the smallest apricot in the package. It shall be stated in terms of whole and eighth inches, as 1½ inches min., 1⅝ inches min., etc., in accordance with the facts.

TOLERANCES

§51.2928 Tolerances.

In order to allow for variations incident to proper grading and handling the following tolerances are provided as specified:

(a) *Defects*—(1) *U.S. No. 1 grade.* Not more than 10 percent, by count, of any lot may be below the requirements of this grade and provided that not more than 5 percent, shall be allowed for defects causing serious damage and further provided that not more than 1 percent, shall be allowed for decay.

(2) *U.S. No. 2 grade.* Not more than 10 percent, by count, of any lot may be below the requirements of this grade, and not more than 1 percent shall be allowed for decay.

(b) *Size.* (1) If packages are marked with numerical count: Not more than 10 percent of the samples in a lot may fail the one-quarter inch variation requirement designated in §51.2927 paragraph (a).

(2) If packages are marked with minimum size: Not more than 10 percent, by count, of the apricots in any sample may be below the minimum size specified.

APPLICATION OF TOLERANCES

§51.2929 Application of tolerances.

Individual samples are subject to the following limitations: Provided, that the averages for the entire lot are within the tolerances specified for the grade.

(a) For a tolerance of 10 percent or more; individual samples in any lot may contain not more than one and one-half times the tolerance specified, except that 1 decayed or 1 seriously damaged specimen may be permitted in any sample.

(b) For a tolerance of less than 10 percent, individual samples in any lot may contain not more than double the tolerance specified, except that 1 decayed specimen may be permitted in any sample.

DEFINITIONS

§ 51.2930 Mature.

Mature means having reached the stage of development which will insure a proper completion of the ripening process.

§ 51.2931 Well-formed.

Well-formed means having the shape characteristic of the variety.

§ 51.2932 Damage.

Damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or a combination of defects, which materially detracts from the appearance, or the edible or shipping quality of the apricot. The dimensions given for these defects are based on an apricot with a diameter of 1⅞ inches (4.8 cm). Correspondingly larger or smaller dimensions are allowed on larger or smaller apricots. The following specific defects shall be considered as damage:

(a) *Growth Cracks* which are unhealed or when well healed and over three-eighths of an inch (9.5 mm) in length.

(b) *Limbrubs* which are smooth and shallow and are more than one-fourth inch (6.4 mm) in diameter.

(c) *Russeting* which is reddish to brown in color and exceeds 10 percent of the surface or thick, rough, and very dark and exceeds 5 percent of the surface.

(d) *Dirt* including spray residue appearing to the extent that it is readily apparent.

(e) *Scab* spots when cracked or aggregating more than three-eighths inch (9.5 mm) in diameter.

(f) *Scale* occurring as scale insects, scale marks, or similar marks which are heavily concentrated or are scattered and aggregating more than one-fourth inch (6.3 mm) in diameter.

(g) *Hail* when the skin has been broken or when not shallow and superficial or more than three-eighths inch (9.5 mm) in diameter in the aggregate.

(h) *Bruises* when: (1) The flesh is discolored deeper than one-eighth of an inch (3.1 mm); or

(2) Any bruise causing discoloration exceeding the area of a circle three-eighths inch (9.5 mm) in diameter; or

(3) An aggregate of lesser bruises detracting from the appearance, edible or shipping quality of the apricot as much as paragraph (h) (1) or (2) of this section.

§ 51.2933 Serious damage.

Serious Damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or a combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the apricot. The dimensions given for these defects are based on an apricot with a diameter of 1⅞ inches (4.8 cm). Correspondingly larger or smaller dimensions are allowed on larger or smaller apricots. The following specific defects shall be considered as serious damage:

(a) *Growth Cracks* which are unhealed or when well healed and over one-half inch (12.7 mm) in length.

(b) *Limbrubs* which are smooth and shallow and are more than one-half inch (12.7 mm) in diameter.

(c) *Russeting* which is reddish to brown in color and exceeds one-third of the surface or thick, rough, and very dark and exceeds 15 percent of the surface.

(d) *Dirt* including spray residue which is readily apparent and seriously affects the appearance.

(e) *Scab* spots when cracked or when well healed and aggregating more than one inch (2.5 cm) in diameter.

(f) *Scale* occurring as scale insects, scale marks, or similar marks aggregating more than one-half inch (12.7 mm) in diameter.

(g) *Hail* when the skin has been broken or when more than three sixteenths (4.8 mm) of an inch deep or more than one-half inch (12.7 mm) in diameter in the aggregate.

(h) *Bruises* when: (1) The flesh is discolored deeper than three-sixteenths of an inch (4.8 mm); or

(2) Any bruise causing discoloration exceeding the area of a circle five-eighths inch (15.9 mm) in diameter; or

(3) An aggregate of lesser bruises detracting from the appearance, edible or shipping quality of the apricot as much as paragraph (h)(1) or (2) of this section.

§ 51.2934 Diameter.

Diameter means the greatest diameter, measured through the center of the apricot, at right angles to a line running from the stem to the blossom end.

Subpart—United States Standards for Grades of Walnuts in the Shell

SOURCE: 29 FR 12865, Sept. 12, 1964, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GENERAL

§ 51.2945 Application.

The standards contained in this subpart apply only to walnuts commonly known as English or Persian walnuts (Juglans regia). They do not apply to the walnuts commonly known as black walnuts (Juglans nigra).

§ 51.2946 Color chart.

The color chart (USDA Walnut Color Chart) to which reference is made in §§ 51.2948, 51.2949, 51.2950, 51.2954, and 51.2963 illustrates four shades of color used to describe skin color of walnut kernels.

(a) *Availability of color chart.* The USDA Walnut Color Chart cited in this subpart has been filed with the original document and is available for inspection in the Office of the Federal Register. The color chart is also available for inspection in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250, in any field office of the Fresh Fruit and Vegetable Inspection Service of the Fruit and Vegetable Division, or upon request of any authorized inspector of such Service. Copies of the color chart may be purchased from Munsell Color Co., Inc., 2441 North Calvert Street, Baltimore, Md. 21218.

[33 FR 10840, July 31, 1968. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

§ 51.2947 Method of inspection.

In determining the grade of a lot of walnuts, all of the nuts in the sample first should be graded for size and then examined for external defects. The same nuts then should be cracked and examined for internal defects. The nuts must meet the requirements for both external and internal quality in order to meet a designated grade.

GRADES

§ 51.2948 U.S. No. 1.

''U.S. No. 1'' consists of walnuts in shells which are dry, practically clean, bright and free from splits, injury by discoloration, and free from damage caused by broken shells, perforated shells, adhering hulls or other means. The kernels are well dried, free from decay, dark discoloration, rancidity, and free from damage caused by mold, shriveling, insects or other means. (See § 51.2954.)

(a) At least 70 percent, by count, of the walnuts have kernels which are not darker than ''light amber'' (see color chart), and which are free from grade defects: *Provided,* That at least four-sevenths of the above amount, or 40 percent of the walnuts have kernels which are not darker than ''light'' (see color chart). Higher percentages of nuts with kernels not darker than ''light amber'' which are free from grade defects and/or higher percentages with kernels not darker than ''light'' which are free from grade defects, may be specified in accordance with the facts. (See § 51.2954.)

(b) Size shall be specified in connection with the grade. (See § 51.2952.)

§ 51.2949 U.S. No. 2.

''U.S. No. 2'' consists of walnuts in shells which are dry, practically clean and free from splits, and free from damage caused by broken shells, perforated shells, adhering hulls, discoloration or other means. The kernels are well dried, free from decay, dark discoloration, rancidity, and free from damage caused by mold, shriveling, insects or other means. (See § 51.2954.)

(a) At least 60 percent, by count, of the walnuts have kernels which are not darker than ''light amber'' (see color chart), and which are free from grade defects. Higher percentages of nuts with kernels not darker than ''light amber'' which are free from grade defects, and/or percentages with kernels not darker than ''light'' (see color

chart) which are free from grade defects, may be specified in accordance with the facts. (See § 51.2954.)

(b) Size shall be specified in connection with the grade. (See § 51.2952.)

§ 51.2950 U.S. No. 3.

''U.S. No. 3'' consists of walnuts in shells which are dry, fairly clean, free from splits, and free from damage caused by broken shells, and free from serious damage caused by discoloration, perforated shells, adhering hulls or other means. The kernels are well dried, free from decay, dark discoloration, rancidity, and free from damage caused by mold, shriveling, insects or other means. (See § 51.2954.)

(a) There is no requirement in this grade for the percentage of walnuts having kernels which are ''light amber'' or ''light''. However, the percentage, by count, of nuts with kernels not darker than ''light amber'' (see color chart) which are free from grade defects and/or the percentage with kernels not darker than ''light'' (see color chart) which are free from grade defects, may be specified in accordance with the facts. (See § 51.2954.)

(b) Size shall be specified in connection with the grade. (See § 51.2952.)

UNCLASSIFIED

§ 51.2951 Unclassified.

''Unclassified'' consists of walnuts in the shell which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

SIZE SPECIFICATIONS

§ 51.2952 Size specifications.

Size shall be specified in accordance with the facts in terms of one of the following classifications:

(a) *Mammoth size.* Mammoth size means walnuts of which not over 12 percent, by count, pass through a round opening 96/64 inches in diameter;

(b) *Jumbo size.* Jumbo size means walnuts of which not over 12 percent, by count, pass through a round opening 80/64 inches in diameter;

(c) *Large size.* Large size means walnuts of which not over 12 percent, by count, pass through a round opening 77/64 inches in diameter; except that for walnuts of the Eureka variety and type, such limiting dimension as to diameter shall be 76/64 inches;

(d) *Medium size.* Medium size means walnuts of which at least 88 percent, by count, pass through a round opening 77/64 inches in diameter, and of which not over 12 percent, by count, pass through a round opening 73/64 inches in diameter;

(e) *Standard size.* Standard size means walnuts of which not over 12 percent, by count, pass through a round opening 73/64 inches in diameter;

(f) *Baby size.* Baby size means walnuts of which at least 88 percent, by count, pass through a round opening 74/64 inches in diameter, and of which not over 10 percent, by count, pass through a round opening 60/64 inch in diameter; and,

(g) *Minimum diameter, or minimum and maximum diameter.* In lieu of one of the foregoing classifications, size of walnuts may be specified in terms of minimum diameter, or minimum and maximum diameter: *Provided,* That not more than 12 percent, by count, pass through a round hole of the specified minimum diameter, and at least 88 percent, by count, pass through a round hole of any specified maximum diameter.

VARIETY OR TYPE SPECIFICATIONS

§ 51.2953 Variety or type specifications.

The variety or type of any lot, of walnuts in the shell may be specified in accordance with the facts as follows:

(a) If the lot is of one named variety, that variety name may be specified, *Provided,* That not over 10 percent, by count, of the walnuts in the lot are of another variety or type than that specified; and,

(b) If the lot is a mixture of two or more distinct varieties or types it may be specified as ''Mixed Varieties''.

TOLERANCES FOR GRADE DEFECTS

§ 51.2954 Tolerances for Grade Defects.

In order to allow for variations incident to proper grading and handling,

the following tolerances shall be permitted for nuts which fail to meet the requirements of the respective grades as indicated. Terms in quotation marks refer to color classifications illustrated on the color chart.

TOLERANCES FOR GRADE DEFECTS

Grade	External (shell) defects	Internal (kernel) defects	Color of kernel
U.S. No. 1.	10 pct, by count for splits. 5 pct. by count, for other shell defects, including not more than 3 pct seriously damaged.	10 pct total by count, including not more than 6 pct which are damaged by mold or insects or seriously damaged by other means, of which not more than ⅝ or 5 pct may be damaged by insects, but no part of any tolerance shall be allowed for walnuts containing live insects.	No tolerance to reduce the required 70 pct of ''light amber'' kernels or the required 40 pct of ''light'' kernels or any larger percentage of ''light amber'' or ''light'' kernels specified.
U.S. No. 2.	10 pct, by count, for splits. 10 pct, by count, for other shell defects, including not more than 5 pct serious damage by adhering hulls.	15 pct total, by count, including not more than 8 pct which are damaged by mold or insects or seriously damaged by other means, of which not more than ⅝ or 5 pct may be damaged by insects, but no part of any tolerance shall be allowed for walnuts containing live insects.	No tolerance to reduce the required 60 pct or any specified larger percentage of ''light amber'' kernels, or any specified percentage of ''light'' kernels.
U.S. No. 3.	Same as above tolerance for U.S. No. 2.	Same as above tolerance for U.S. No. 2.	No tolerance to reduce any percentage of ''light amber'' or ''light'' kernel specified.

[41 FR 44187, Oct. 7, 1976. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981]

APPLICATION OF TOLERANCES

§ 51.2955 Application of tolerances.

The tolerances provided in these standards are on a lot basis, and they shall be applied to a composite sample representative of the lot. However, any identifiable container or group of containers in which the walnuts are obviously of a quality materially different from that in the majority of the containers shall be considered as a separate lot, and shall be sampled separately.

DEFINITIONS

§ 51.2956 Practically clean.

Practically clean means that, from the viewpoint of general appearance, the walnuts are practically free from adhering dirt or other foreign matter, and that individual walnuts are not damaged by such means. A slightly chalky deposit on the shell is characteristic of many bleached nuts and shall not be considered as dirt or foreign matter.

§ 51.2957 Bright.

Bright means a fairly light, attractive appearance. A slight chalky deposit on the shell shall not be considered as affecting brightness.

§ 51.2958 Splits.

Splits means walnuts with the seam opened completely around the nut so that the two halves of the shell are held together only by the kernel.

§ 51.2959 Injury by discoloration.

Injury by discoloration means that the color of the affected portion of the shell objectionably contrasts with the color of the rest of the shell of the individual nut.

§ 51.2960 Damage.

Damage means any specific defect mentioned in this section; or any equally objectionable variation of any one of these defects, any other defect, or any combination of defects which materially detracts from the appearance or the edible or shipping quality of the individual walnut or the lot as a whole. The following specific defects shall be considered as damage:

(a) Broken shells when the area from which a portion of the shell is missing is greater than the area of a circle one-fourth inch in diameter; or when the two halves of the shell have become completely broken apart and separated from each other;

(b) Perforated shells when the area affected aggregates more than that of a circle one-fourth inch in diameter. The term ''perforated shells'' means imperfectly developed areas on the shell resembling abrasions and usually including small holes penetrating the shell wall;

(c) Adhering hulls when affecting more than 5 percent of the shell surface;

(d) Discoloration (or stain) which covers, in the aggregate, one-fifth or more of the surface of the shell of an individual nut, and which is brown, reddish brown, gray, or other color in pronounced contrast with the color of the rest of the shell or the majority of shells in the lot, or darker discoloration covering a smaller area if the appearance is equally objectionable;

(e) Mold when attached to the kernel and conspicuous; or when inconspicuous white or gray mold affects an aggregate area larger than one square centimeter or one-eighth of the entire surface of the kernel, whichever is the lesser area;

(f) Shriveling when more than 5 percent of the surface of the kernel, including both halves, is severely shriveled, or a greater area is affected by lesser degrees of shriveling producing an equally objectionable appearance. Kernels which are thin in cross section but which are otherwise normally developed shall not be considered as damaged; and,

(g) Insects when an insect or insect fragment, web or frass is present inside the shell, or the kernel shows distinct evidence of insect feeding.

§ 51.2961 Well dried.

Well dried means that the kernel is firm and crisp, not pliable or leathery.

§ 51.2962 Decay.

Decay means that any portion of the kernel is decomposed.

§ 51.2963 Dark discoloration.

Dark discoloration means that the color of the skin of the kernel is darker than ''amber''. (See color chart.)

§ 51.2964 Rancidity.

Rancidity means the stage of deterioration in which the kernel has developed a rancid flavor. Rancidity should not be confused with a slightly astringent flavor of the pellicle (skin) or with staleness, the stage at which the flavor is flat but not distasteful.

§ 51.2965 Fairly clean.

Fairly clean means that, from the viewpoint of general appearance, the lot is not seriously damaged by adhering dirt or other foreign matter, and that individual walnuts are not coated or caked with dirt or foreign matter. Both the amount of surface affected and the color of the dirt shall be taken into consideration.

§ 51.2966 Serious damage.

Serious damage means any specific defect mentioned in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detracts from the appearance or the edible or shipping quality of the walnut. The following specific defects shall be considered as serious damage:

(a) Discoloration (or stain) which covers, in the aggregate, one-third or more of the surface of the shell of an individual nut and which is brown, reddish brown, gray, or other color in pronounced contrast with the color of the rest of the shell or the majority of shells in the lot, or darker discoloration covering a smaller area if the appearance is equally objectionable;

(b) Perforated shells when the area affected aggregates more than that of a circle three-eighths of an inch in diameter. The term ''perforated shells'' means imperfectly developed areas on the shell resembling abrasions and usually including small holes penetrating the shell wall;

(c) Adhering hulls when affecting more than one-eighth of the shell surface in the aggregate;

(d) Shriveling when both halves of the kernel are affected by severe shriveling over an area totaling more than one-eighth of the surface; or when both halves are affected over a greater area by lesser degrees of shriveling producing an equally objectionable appearance. When one of the halves of the kernel shows no shriveling, the kernel shall not be considered seriously damaged unless the other half shows shriveling to the extent that over 50 percent of its surface is severely shriveled, or a greater area is affected by lesser degrees of shriveling producing an equally objectionable appearance. Kernels which are thin in cross section, but which are otherwise normally developed shall not be considered as damaged;

(e) Rancidity or decay; and,

(f) Uncured kernels which are wet, rubbery and ''green''.

Subpart—United States Standards for Florida Avocados

SOURCE: 22 FR 6205, Aug. 3, 1957, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.3050 U.S. No. 1.

''U.S. No. 1'' consists of avocados of similar varietal characteristics which are mature but not overripe, well formed, clean, well colored, well trimmed and which are free from decay, anthracnose, and freezing injury and are free from damage caused by bruises, cuts or other skin breaks, pulled stems, russeting or similar discoloration, scars or scab, sunburn, sunscald or sprayburn, cercospora spot, other disease, insects, or mechanical or other means.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent, by count, of the avocados in any lot may fail to meet the requirements of this grade: *Provided,* That not more than one-half of this amount, or 5 percent, shall be allowed for avocados affected by decay or anthracnose, including therein not more than 1 percent for avocados affected by decay. (See §§ 51.3055 and 51.3056.)

§ 51.3051 U.S. Combination.

''U.S. Combination'' consists of a combination of U.S. No. 1 and U.S. No. 2 avocados: *Provided,* That at least 60 percent, by count, of the avocados in each container meet the requirements of the U.S. No. 1 grade.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent, by count, of the avocados in any lot may fail to meet the requirements of the U.S. No. 2 grade: *Provided,* That not more than one-half of this amount, or 5 percent, shall be allowed for avocados affected by decay or seriously damaged by anthracnose, including therein not more than 1 percent for avocados affected by decay. No part of any tolerance shall be allowed to reduce for the lot as a whole the percentage of U.S. No. 1 fruit required or specified in the combination, but individual containers may have not more than 10 percent less than the percentage of U.S. No. 1 fruit required or specified. (See §§ 51.3055 and 51.3056.)

§ 51.3052 U.S. No. 2.

''U.S. No. 2'' consists of avocados of similar varietal characteristics which are mature but not overripe, fairly well formed, clean, fairly well colored, well trimmed and which are free from decay and freezing injury and are free from serious damage caused by anthracnose, bruises, cuts or other skin breaks, pulled stems, russeting or similar discoloration, scars or scab, sunburn, sunscald or sprayburn, cercospora spot, other disease, insects, or mechanical or other means.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent, by count, of the avocados in any lot may fail to meet the requirements of this grade: *Provided,* That not more than one-half of this amount, or 5 percent, shall be allowed for avocados affected by decay or seriously damaged by anthracnose, including therein not more than 1 percent for avocados affected by decay. (See §§ 51.3055 and 51.3056.)

§ 51.3053 U.S. No. 3.

''U.S. No. 3'' consists of avocados of similar varietal characteristics which

are mature but not overripe, which are not badly misshapen, and which are free from decay and are free from serious damage caused by anthracnose and are free from very serious damage caused by freezing injury, bruises, cuts or other skin breaks, pulled stems, russeting or similar discoloration, scars or scab, sunburn, sunscald or sprayburn, cercospora spot, other disease, insects, dirt or mechanical or other means.

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent, by count, of the avocados in any lot may fail to meet the requirements of this grade, including therein not more than 2 percent for avocados affected by decay. (See §§51.3055 and 51.3056.)

UNCLASSIFIED

§ 51.3054 Unclassified.

''Unclassified'' consists of avocados which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

STANDARD PACK

§ 51.3055 Standard pack.

(a) The avocados shall be packed in accordance with good commercial practice and the pack shall be at least fairly tight. The weight of the smallest fruit in any container shall be not less than 75 percent of the weight of the largest fruit in the container. Size of the avocados may be specified by count.

(b) In order to allow for variations incident to proper sizing and packing, not more than 5 percent, by count, of the avocados in any container may weigh less than 75 percent of the weight of the largest fruit: *Provided,* That no fruit in any container shall weigh less than 60 percent of the weight of the largest fruit in the container. In addition, not more than 5 percent of the containers in any lot may fail to meet the requirement as to tightness of pack.

APPLICATION OF TOLERANCES

§ 51.3056 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(1) For packages which contain more than 20 avocados and a tolerance of 10 percent or more is provided, individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 20 avocados and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package; and,

(2) For packages which contain 20 avocados or less, individual packages shall have not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package.

DEFINITIONS

§ 51.3057 Similar varietal characteristics.

Similar varietal characteristics means that the avocados in any container are similar in shape, texture, and color of skin and flesh.

§ 51.3058 Mature.

Mature means that the avocado has reached a stage of growth which will insure a proper completion of the ripening process.

§ 51.3059 Overripe.

Overripe means that the avocado is dead ripe with flesh soft or discolored and past commercial use.

§ 51.3060 Well formed.

Well formed means that the avocado has the normal shape characteristic of the variety.

§ 51.3061 Clean.

Clean means that the avocado is practically free from dirt, staining or other foreign material.

§51.3062 Well colored.

Well colored means that the avocado has the color characteristic of the variety.

§51.3063 Well trimmed.

Well trimmed means that the stem, when present, is cut off fairly smoothly at a point not more than one-fourth inch beyond the shoulder of the avocado.

§51.3064 Damage.

Damage means any defect which materially affects the appearance, or the edible or shipping quality of the individual fruit, or the general appearance of the avocados in the container. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Cuts or other skin breaks when not healed and penetrating beneath the epidermis or the aggregate area exceeds that of a rectangle 1 inch in length and one-eighth inch in width, or when healed and the appearance is materially affected;

(b) Pulled stems when the exposed stem cavity is excessively deep, or when skin surrounding the stem cavity is more than slightly torn;

(c) Russeting or similar discoloration when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown surface discoloration aggregating 10 percent of the fruit surface;

(d) Scars or scab when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown superficial, fairly smooth scars aggregating 10 percent of the fruit surface;

(e) Sunburn when the appearance of the avocado is affected to a greater extent than that of an avocado which has greenish-yellow colored sunburn aggregating 10 percent of the fruit surface; and,

(f) Sunscald or sprayburn when not well healed, or when soft, or when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown, superficial scars aggregating 10 percent of the fruit surface.

§51.3065 Fairly well formed.

Fairly well formed means that the avocado may be slightly abnormal in shape but not to the extent that the appearance is seriously affected.

§51.3066 Fairly well colored.

Fairly well colored means that the avocado shows a shade of color which is fairly characteristic of the variety.

§51.3067 Serious damage.

Serious damage means any defect which seriously affects the appearance, or the edible or shipping quality of the individual fruit, or the general appearance of the avocados in the container. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

(a) Anthracnose when any spot exceeds the area of a circle one-fourth inch in diameter, or when more than 3 spots each of which exceeds the area of a circle three-sixteenths inch in diameter;

(b) Cuts or other skin breaks when not healed and penetrating into the flesh of the fruit, or the aggregate area exceeds that of a rectangle 1 inch in length and one-fourth inch in width, or when healed and the appearance is seriously affected;

(c) Pulled stems when the skin surrounding the exposed stem cavity is torn more than an aggregate area of a circle one-fourth inch in diameter, or when the flesh is torn;

(d) Russeting or similar discoloration when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown surface discoloration aggregating 25 percent of the fruit surface;

(e) Scars or scab when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown superficial fairly smooth scars aggregating 25 percent of the fruit surface;

(f) Sunburn when the appearance of the avocado is affected to a greater extent than that of an avocado which has greenish-yellow colored sunburn aggregating 25 percent of the fruit surface;

(g) Sunscald or sprayburn when not well healed, or when soft, or when the

appearance of the avocado is affected to a greater extent than that of an avocado which has light brown superficial, fairly smooth scars aggregating 25 percent of the fruit surface; and

(h) Cercospora spot when any spot exceeds the area of a circle one-fourth inch in diameter, or when more than 3 spots each of which exceeds the area of a circle three-sixteenths inch in diameter, or when the aggregate area of all spots exceeds the area of a circle 1 inch in diameter.

§ 51.3068 Badly misshapen.

Badly misshapen means that the avocado is so badly curved, constricted, pointed or otherwise deformed that the appearance is very seriously affected.

§ 51.3069 Very serious damage.

Very serious damage means any defect which very seriously affects the appearance, or the edible or shipping quality of the avocado. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as very serious damage:

(a) Cuts or other skin breaks when not healed and penetrating into the flesh of the fruit, or any skin break very seriously affecting the appearance, or the edible or shipping quality;

(b) Pulled stems when the skin surrounding the exposed stem cavity is torn more than an aggregate area of a circle one-half inch in diameter, or when the flesh is torn;

(c) Russeting or similar discoloration when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown surface discoloration aggregating 50 percent of the fruit surface;

(d) Scars or scab when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown superficial, fairly smooth scars aggregating 50 percent of the fruit surface;

(e) Sunburn when the appearance of the avocado is affected to a greater extent than that of an avocado which has greenish-yellow colored sunburn aggregating 50 percent of the fruit surface; and,

(f) Sunscald or sprayburn when not well healed, or when the appearance of the avocado is affected to a greater extent than that of an avocado which has light brown superficial, fairly smooth scars aggregating 50 percent of the fruit surface.

Subpart—United States Standards for Grades of Nectarines[1]

SOURCE: 31 FR 6243, Apr. 23, 1966, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.3145 U.S. Fancy.

''U.S. Fancy'' consists of nectarines of one variety which are mature but not soft or overripe, which are well formed, clean, and free from decay, broken skins which are not healed, worms, worm holes, and free from injury caused by bruises, growth cracks, hail, sunburn, sprayburn, scab, bacterial spot, scale, split pit, scars, russeting, other disease, insects, or mechanical or other means.

(a) In the case of the John Rivers variety each nectarine shall show some blushed or red color. In the case of other varieties each nectarine shall have not less than one-third of its surface showing red color characteristic of the variety. (See § 51.3150.)

§ 51.3146 U.S. Extra No. 1.

''U.S. Extra No. 1'' consists of nectarines of one variety which are mature but not soft or overripe, which are well formed, clean, and free from decay, broken skins which are not healed, worms, worm holes and free from injury caused by split pit and free from damage caused by bruises, growth cracks, hail, sunburn, sprayburn, scab, bacterial spot, scale, scars, russeting, other disease, insects or mechanical or other means.

(a) In the case of John Rivers variety at least 50 percent of the nectarines in

[1] Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

any lot shall show some blushed or red color. In the case of other varieties at least 75 percent of the nectarines in any lot shall show some blushed or red color including therein at least 50 percent of the nectarines with not less than one-third of the fruit surface showing red color characteristic of the variety. (See § 51.3150.)

§ 51.3147 U.S. No. 1.

''U.S. No. 1'' consists of nectarines of one variety which are mature but not soft or overripe, which are well formed, clean, and free from decay, broken skins which are not healed, worms, worm holes, and free from injury caused by split pit and free from damage caused by bruises, growth cracks, hail, sunburn, sprayburn, scab, bacterial spot, scale, scars, russeting, other disease, insects, or mechanical or other means.

(a) At least 75 percent of the nectarines in any lot shall show some blushed or red color, except that there are no color requirements for nectarines of the John Rivers variety in this grade. (See § 51.3150.)

§ 51.3148 U.S. No. 2.

''U.S. No. 2'' consists of nectarines of one variety which are mature but not soft or overripe, which are not badly misshapen, which are clean and free from decay, broken skins which are not healed, worms, worm holes, and free from serious damage caused by bruises, growth cracks, hail, sunburn, sprayburn, scab, bacterial spot, scale, split pit, scars, russeting, other disease, insects, or mechanical or other means.

(a) There are no color requirements for nectarines in this grade. (See § 51.3150.)

UNCLASSIFIED

§ 51.3149 Unclassified.

''Unclassified'' consists of nectarines which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.3150 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

(a) *U.S. Fancy, U.S. Extra No. 1, and U.S. No. 1 grades*—(1) *For defects at shipping point.*[2] 8 percent for nectarines which fail to meet the requirements of the specified grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for nectarines which are affected by decay.

(2) *For defects en route or at destination.* 12 percent for nectarines which fail to meet the requirements of the specified grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for permanent defects;

(ii) 6 percent for defects causing serious damage, including therein not more than 4 percent for serious damage by permanent defects and not more than 2 percent for decay.

(3) *For color*—(i) *U.S. Fancy grade.* 10 percent for nectarines in any lot which fail to meet the requirements of the grade.

(ii) *U.S. Extra No. 1 grade and U.S. No. 1 grade.* Individual containers may contain not more than 10 percentage points less than the required percentage of nectarines showing the amount of color specified for the respective grade: *Provided,* That the entire lot averages not less than the required percentage of nectarines showing the specified color for the grade.

(b) *U.S. No. 2 grade*—(1) *For defects at shipping point.*[2] 8 percent for nectarines which fail to meet the requirements of the grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for sunscald, decay, or

[2] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

serious damage by insects or heat injury, including in this latter amount not more than one-half of 1 percent for nectarines which are affected by decay.

(2) *For defects en route or at destination.* 12 percent for nectarines which fail to meet the requirements of the grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for permanent defects including therein not more than 4 percent for sunscald, or serious damage by insects or heat injury; and,

(ii) 2 percent for decay.

APPLICATION OF TOLERANCES

§ 51.3151 Application of tolerances.

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

(a) A package may contain not more than double any specified tolerance except that at least two defective specimens may be permitted in any package: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade.

STANDARD PACK

§ 51.3152 Standard pack.

(a) Nectarines shall be fairly uniform in size and shall be packed in boxes, lugs, crates, cartons, or baskets and arranged according to the approved and recognized methods. All such containers shall be tightly packed and well filled but the contents shall not show excessive or unnecessary bruising resulting from overfilling. The nectarines in the shown face shall be reasonably representative in size, color and quality of the contents of the container. Each wrapped fruit shall be fairly well enclosed by its individual wrapper.

(b) When packed in closed containers, the size shall be indicated by marking the container with the numerical count, the pack arrangement, or the minimum diameter or minimum and maximum diameters in terms of inches and not less than one-eighth fractions of inches.

(c) Boxes, lugs or cartons:

(1) Nectarines packed in containers equipped with cell compartments, cardboard fillers or molded trays shall be of the proper size for the cells, fillers, or molds in which they are packed, and the number of nectarines in the container shall correspond to the count marked on the container.

(2) In order to allow for variations incident to proper packing, when packed in other types of packs in lugs, cartons, or boxes, the number of nectarines in the container may vary not more than two from the number marked on the container.

(d) Four-basket crates:

(1) The size of nectarines packed in four-basket crates shall be indicated as follows: 3 × 4, 3—4 × 4, 3—4 × 5, 4 × 4, etc., in accordance with the arrangement in the top layer of the basket. These packs shall not be more than three layers deep.

(2) The arrangement of the bottom layer shall be one row less one way, and may be one row less each way, than the arrangement of the top layer. The arrangement of the middle layer may be the same as the top layer or may be one row less one way than the arrangement of the top layer. Straight, offset, and diagonal packs in the layers are permitted.

(e) Baskets: Nectarines packed in U.S. standard half-bushel baskets shall be ring faced and tightly packed with sufficient bulge to prevent any appreciable movement of the nectarines within the baskets when lidded.

(f) ''Fairly uniform in size'' means that when the average diameter of nectarines in any container is 2 inches or smaller not more than 5 percent, by count, of the nectarines in the container shall be outside a diameter range of one-fourth inch; when the average diameter of nectarines in any container is over 2 inches not more than 5 percent, by count, of the nectarines in the container shall be outside a diameter range of three-eighths inch.

(g) Minimum size: When size is indicated in terms of minimum diameter not more than 5 percent, by count, of the fruit in any container may be smaller than the size marked.

(h) ''Diameter'' means the greatest dimension measured at right angles to

a line from stem to blossom end of the fruit.

(i) *Tolerances.* In order to allow for variations incident to proper sizing and packing, not more than 10 percent, by count, of the containers in any lot may fail to meet the requirements for standard pack.

DEFINITIONS

§ 51.3153 Mature.

Mature means that the nectarine has reached the stage of growth which will insure a proper completion of the ripening process.

§ 51.3154 Well formed.

Well formed means that the nectarine has the shape characteristic of the variety and that bumps or other roughness do not materially detract from the appearance.

§ 51.3155 Clean.

Clean means that the fruit is practically free from dirt and other foreign material.

§ 51.3156 Injury.

Injury means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which more than slightly detracts from the appearance, or the edible or marketing quality of the fruit. The following specific defects shall be considered as injury:

(a) Growth cracks:

(1) When not healed;

(2) When more than one in number;

(3) When more than one-eighth inch in depth; or,

(4) When more than one-eighth inch in length.

(b) Heat injury, sprayburn or sunburn when the normal color of the skin or flesh is more than slightly changed, or when any indentation is present;

(c) Scab or bacterial spot when cracked, or when the aggregate area exceeds that of a circle one-eighth inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the aggregate area exceeds that of a circle one-fourth inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(d) Scale or scale marks when more than one large scale or scale mark or when more than three scales or scale marks of any size are present;

(e) Split pit when causing any unhealed crack, or when healed and aggregating more than one-fourth inch in length, or when affecting the shape to the extent that the fruit is not well formed;

(f) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-eighth inch in diameter;

(g) Scars, including those caused by hail, when the surface of the fruit is depressed more than one-sixteenth inch or when not light in color, or when not smooth, or when exceeding any of the following aggregate areas, or a combination of two or more types of scars the seriousness of which exceeds the maximum allowed for any one type:

(1) Light colored, smooth scars when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the area exceeds that of a circle one-half inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(2) Twig or limb scratches which are not well healed or which have an aggregate length of more than one-fourth inch; and

(h) Russeting which exceeds any of the following aggregate areas of any one type of russeting, or a combination of two or more types of russeting the seriousness of which exceeds the maximum allowed for any one type:

(1) Rough or slightly rough russeting when the area exceeds that of a circle one-eighth inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the area exceeds that of a circle one-fourth inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(2) Fairly smooth or smooth russeting or staining when the area exceeds 10 percent of the fruit surface: *Provided,* That speckling characteristic of certain varieties shall not be considered as russeting or discoloration.

§ 51.3157 Damage.

Damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit. The following specific defects shall be considered as damage:

(a) Growth cracks:

(1) When not healed;

(2) When more than one in number;

(3) When more than one-eighth inch in depth;

(4) When more than three-eighths inch in length if within the stem cavity; or,

(5) When more than one-fourth inch in length if outside of the stem cavity;

(b) Heat injury, sprayburn or sunburn:

(1) When the skin is blistered, cracked, or decidedly flattened;

(2) When the normal color of the skin or flesh has materially changed;

(3) When there is more than one indentation; or,

(4) When an indentation exceeds three-sixteenths inch in diameter;

(c) Scab or bacterial spot when cracked, or when the aggregate area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the aggregate area exceeds that of a circle three-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(d) Scale or scale marks when the aggregate area exceeds that of a circle one-fourth inch in diameter;

(e) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-fourth inch in diameter;

(f) Scars, including those caused by hail, when the surface of the fruit is depressed more than one-sixteenth inch, or when exceeding any of the following aggregate areas, or a combination of two or more types of scars the seriousness of which exceeds the maximum allowed for any one type:

(1) Dark or rough scars when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the aggregate area exceeds that of a circle three-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(2) Fairly light colored, fairly smooth scars when the area exceeds that of a circle one-half inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the area exceeds that of a circle five-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(3) Light colored, smooth scars when the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4 × 4 size, or smaller; or when the area exceeds that of a circle seven-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 × 4 size;

(4) Twig or limb scratches which are not well healed or which have an aggregate length of more than one-half inch; and

(g) Russeting which exceeds any of the following aggregate areas of any one type of russeting, or a combination of two or more types of russeting the seriousness of which exceeds the maximum allowed for any one type:

(1) Rough russeting when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle one-half inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;

(2) Slightly rough russeting when the area exceeds that of a circle five-eighths inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle three-fourths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;

(3) Fairly smooth or smooth russeting when the area exceeds 25 percent of the fruit surface of Freedom, Early LeGrand, and Quetta varieties and 15 percent of the fruit surface of other varieties: *Provided,* That discoloration occurring as yellow to brown staining of the skin shall not be considered as russeting and shall be considered as causing damage only when materially detracting from the appearance of the nectarine, and that speckling characteristic of certain varieties shall not be considered as russeting or discoloration.

§ 51.3158 Badly misshapen.

Badly misshapen means that the nectarine is so decidedly deformed that its appearance is seriously affected.

§ 51.3159 Serious damage.

Serious damage means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detracts from the appearance or the edible or marketing quality of the fruit. The following specific defects shall be considered as serious damage:

(a) Growth cracks:

(1) When not healed and more than one-eighth inch in length or depth;

(2) When healed and more than three-sixteenths inch in depth;

(3) When healed and aggregating more than five-eighths inch in length if within the stem cavity; or,

(4) When healed and aggregating more than one-half inch in length if outside of the stem cavity;

(b) Heat injury, sprayburn or sunburn:

(1) When the skin is blistered, cracked, or decidedly flattened;

(2) When causing any dark discoloration of the flesh;

(3) When there are more than two indentations;

(4) When the aggregate area of indentations exceeds that of a circle three-eighths inch in diameter; or,

(5) When causing noticeable brownish or darker discoloration over more than one-fourth of the fruit surface;

(c) Scab or bacterial spot when the aggregate area exceeds that of a circle one-half inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the aggregate area exceeds that of a circle three-fourths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;

(d) Scale or scale marks when the aggregate area exceeds that of a circle three-eighths inch in diameter;

(e) Split pit when causing any unhealed crack or when healed and aggregating more than three-eighths inch in length, or when affecting the shape to the extent that the fruit is badly misshapen;

(f) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-half inch in diameter;

(g) Scars, including those caused by hail, when the surface of the fruit is depressed more than three-sixteenths inch, or when exceeding any of the following aggregate areas, or a combination of two or more types of scars the seriousness of which exceeds the maximum allowed for any one type:

(1) Dark or rough scars when the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle one inch in diameter on fruit larger than 2 inches in diameter or 4 x 4 size;

(2) Scars which are not dark or rough when the area exceeds one-fourth of the fruit surface;

(h) Russeting which exceeds any of the following aggregate areas of any one type of russeting, or a combination of two or more types of russeting the seriousness of which exceeds the maximum allowed for any one type:

(1) Rough or slightly rough russeting when the area exceeds 10 percent of the fruit surface; or

(2) Fairly smooth or smooth russeting when the area exceeds 50 percent of the fruit surface: *Provided*, That discoloration occurring as yellow to brown staining of the skin shall not be considered russeting and shall be considered as causing serious damage only when seriously detracting from the appearance of the nectarine, and that speckling characteristic of certain varieties shall not be considered as russeting or discoloration.

(i) Soft or overripe nectarines;

(j) Nectarines affected by decay;

(k) Unhealed broken skins except those associated with growth cracks; and,

(l) Wormy fruit or worm holes.

METRIC CONVERSION TABLE

§ 51.3160 Metric conversion table.

Inches	Millimeters (mm)
⅛ equals	3.2
¼ equals	6.4
⅜ equals	9.5
½ equals	12.7
⅝ equals	15.9
¾ equals	19.1
⅞ equals	22.2

Inches	Millimeters (mm)
1 equals	25.4
1¼ equals	31.8
1½ equals	38.1
1¾ equals	44.5
2 equals	50.8
3 equals	76.2
4 equals	101.6

Subpart—United States Standards for Grades of Bermuda-Granex-Grano Type Onions

SOURCE: 60 FR 46980, Sept. 8, 1995, unless otherwise noted.

GRADES

§ 51.3195 U.S. No. 1.

U.S. No. 1 consists of onions which meet the following requirements:

(a) Basic requirements:

(1) Similar varietal characteristics;

(2) Mature;

(3) Fairly firm; and,

(4) Fairly well shaped.

(b) Free from:

(1) Decay;

(2) Wet sunscald;

(3) Doubles; and,

(4) Bottlenecks.

(c) Free from damage caused by:

(1) Seedstems;

(2) Splits;

(3) Dry sunken areas;

(4) Sunburn;

(5) Sprouting;

(6) Staining;

(7) Dirt or foreign material;

(8) Mechanical;

(9) Tops;

(10) Roots;

(11) Translucent scales;

(12) Watery scales;

(13) Moisture;

(14) Disease;

(15) Insects; and,

(16) Other means.

(d) For size and tolerances see §§ 51.3198 and 51.3199.

§ 51.3196 U.S. Combination.

U.S. Combination consists of a combination of U.S. No. 1 and U.S. No. 2 onions: *Provided,* That at least 50 percent, by weight, of the onions in each lot meet the requirements of U.S. No. 1 grade. (See §§ 51.3198 and 51.3199.)

§ 51.3197 U.S. No. 2.

U.S. No. 2 consists of onions which meet the following requirements:

(a) Basic requirements:

(1) Similar varietal characteristics; and,

(2) Not soft or spongy.

(b) Free from:

(1) Decay;

(2) Wet sunscald; and,

(3) Bottlenecks.

(c) Free from serious damage caused by:

(1) Seedstems;

(2) Dry sunken areas;

(3) Sprouting;

(4) Staining;

(5) Dirt or other foreign material;

(6) Mechanical;

(7) Watery scales;

(8) Insects;

(9) Disease; and,

(10) Other means.

(d) For size and tolerances see §§ 51.3198 and 51.3199.

SIZE CLASSIFICATIONS

§ 51.3198 Size classifications.

Size shall be specified in connection with the grade in terms of minimum diameter, range in diameter, minimum diameter with a percentage of a certain size or larger, or in accordance with one of the size classifications listed below: *Provided,* that unless otherwise specified, onions shall not be less than 1½ inches in diameter, with 60 percent or more 2 inches or larger in diameter.

Size designation	Minimum diameter		Maximum diameter	
	Inches	Millimeters	Inches	Millimeters
Small	1	25.4	2¼	57.2
Repacker/Prepacker [1]	1¾	44.5	3	76.2
Medium	2	50.8	3¼	82.6
Large or Jumbo	3	76.2	(2)	

Size designation	Minimum diameter		Maximum diameter	
	Inches	Millimeters	Inches	Millimeters
Colossal	3¾	95.3	([2])	

[1] In addition to the sizes specified, a lot of onions designated as Repacker or Prepacker shall contain at least 60 percent or more 2 inches or larger in diameter.
[2] No requirement.

TOLERANCES

§ 51.3199 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades the following tolerances, by weight, are provided as specified:

(a) For defects:

(1) *U.S. No. 1 and U.S. No. 2 grades.* Not more than 10 percent of the onions in a lot may fail to meet the requirements of these grades, but not more than one-fifth of this tolerance, or 2 percent, may be allowed for onions which are affected by decay or wet sunscald.

(2) *U.S. Combination grade.* When applying the foregoing tolerances to this grade no part of any tolerance shall be allowed to reduce, for the lot as a whole, the 50 percent of onions of the U.S. No. 1 grade, but individual containers shall have not less than 40 percent of the U.S. No. 1 grade.

(b) For size:

(1) Not more than 5 percent of the onions in a lot may be smaller than the minimum diameter specified. In addition, not more than 10 percent of the onions in a lot may be larger than the maximum diameter specified.

(2) When a percentage of the onions is specified to be a certain size and larger, individual packages containing more than 10 pounds may have not less than one-half of the percentage specified: *Provided,* that the entire lot averages within the percentage specified.

SAMPLES FOR GRADE AND SIZE DETERMINATION

§ 51.3200 Samples for grade and size determination.

Individual samples shall consist of at least 20 pounds for onions packed to meet larger than 2¼ inches maximum diameter. When individual packages contain 20 pounds or more and the onions are packed for Large or Jumbo size or larger the package shall be the sample. When individual packages contain less than 20 pounds, a sufficient number of adjoining packages are opened to provide at least a 20 pound sample, except that for onions packed to meet 2¼ inches maximum diameter or smaller, the sample may consist of either 20 pounds or the individual package.

APPLICATION OF TOLERANCES

§ 51.3201 Application of tolerances.

Individual samples are subject to the following limitations:

(a) Samples which contain more than 20 pounds shall have not more than one and one half times a specified tolerance of 10 percent or more, and not more than double a specified tolerance of less than 10 percent, except that at least one defective and one off-size onion may be permitted in any sample: *Provided,* that en-route or at destination when onions in containers of 50 pounds or more are packed to a minimum size of 3 inches or larger not more than three onions or more than 4 percent (whichever is the larger amount) may be affected by decay or wet sunscald: *And provided further,* that the averages for the entire lot are within the tolerances specified for the grade; and,

(b) Samples which contain 20 pounds or less shall have not more than double the tolerance specified, except that at least one defective and one off-size onion may be permitted in any sample: *Provided,* that the averages for the entire lot are within the tolerances specified for the grade.

DEFINITIONS

§ 51.3202 Similar varietal characteristics.

Similar varietal characteristics means that the onions in any container are

similar in color, shape and character of growth.

§ 51.3203 Mature.

Mature means that the onion is fairly well cured, and at least fairly firm.

§ 51.3204 Fairly firm.

Fairly firm means that the onion may yield slightly to moderate pressure but is not appreciably soft or spongy.

§ 51.3205 Fairly well shaped.

Fairly well shaped means that the onion shows the characteristic shape, not appreciably three-, four- or five-sided, thick necked or badly pinched.

§ 51.3206 Wet sunscald.

Wet sunscald means any sunscald which is soft, mushy, sticky or wet.

§ 51.3207 Doubles.

Doubles means onions which have developed more than one distinct bulb joined only at the base.

§ 51.3208 Bottlenecks.

Bottlenecks means onions which have abnormally thick necks with only fairly well developed bulbs.

§ 51.3209 Damage.

Damage unless otherwise specifically defined in this section, means any defect which materially affects the appearance, or the edible or shipping quality of the onions. Any one of the following defects, or combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Seedstems which are tough or woody, or which are more than ¼ inch in diameter;

(b) Splits when well cured onions are not practically covered by an outer scale, or when fairly well cured onions are not completely covered by one outer scale;

(c) Dry sunken areas when the affected areas exceed the equivalent to that of a circle ½ inch in diameter on an onion 2¾ inches in diameter which does not have the outer papery scale covering the affected areas or when the affected areas exceed the equivalent to that of a circle ¾ inch in diameter on an onion 2¾ inches in diameter which has the outer papery scale covering the affected areas. Correspondingly lesser or greater areas are allowed on smaller or larger onions;

(d) Sunburn when dark green in color and affecting an area equivalent to that of a circle 1 inch in diameter on an onion 2¾ inches in diameter or correspondingly smaller or larger areas on smaller or larger onions, or when medium to light green in color and affecting more than 10 percent of the surface of the onion;

(e) Sprouting when any sprout is visible, or when concealed within the neck scales and are more than ¾ inch in length on an onion 2 inches or larger in diameter, or proportionately shorter on smaller onions;

(f) Staining, dirt or other foreign material when more than 20 percent of the onions in a yellow, brown or red lot, or more than 15 percent of the onions in a white lot are appreciably stained. Onions with adhering dirt or other foreign matter shall be judged on the same basis as stained onions;

(g) Mechanical when any cut extends deeper than one fleshy scale, or when any bruise breaks a fleshy scale;

(h) Tops when more than 30 percent of the onions in a lot have tops 3 inches or more in length;

(i) New roots when most roots on an individual onion have grown to a length of 1 inch or more;

(j) Dry roots when practically all roots are 2 inches or more in length;

(k) Translucent scales when more than the equivalent of two entire outer fleshy scales have a watersoaked condition; and,

(l) Watery scales when more than the equivalent of the entire outer fleshy scale is affected by an off-color, watersoaked condition. The off-color must be of some shade of brown or yellow.

§ 51.3210 Serious damage.

Serious damage unless otherwise specifically defined in this section, means any defect which seriously affects the appearance, or the edible or shipping quality of the onions. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any

one defect, shall be considered as serious damage:

(a) Seedstems when more than ½ inch in diameter;

(b) Dry sunken areas when extending deeper than one fleshy scale, or when affecting an area equivalent to that of a circle 1 inch in diameter on an onion 2¾ inches in diameter, or correspondingly lesser or greater areas on smaller or larger onions;

(c) Sprouting when any visible sprout is more than ½ in length;

(d) Staining, dirt or foreign material when more than 25 percent of the onions in any lot are badly stained. Onions with adhering dirt or other foreign matter shall be judged on the same basis as stained onions;

(e) Mechanical when any cut extends deeper than two fleshy scales, or when cuts seriously damage the appearance of the onion; and,

(f) Watery scales when more than the equivalent of two entire outer fleshy scales are affected by an off-colored, watersoaked condition. The off-color must be of some shade of brown or yellow.

§ 51.3211 Diameter.

Diameter means the greatest dimension of the onion at right angles to a line running from the stem to the root.

METRIC CONVERSION TABLE

§ 51.3212 Metric conversion table.

Inches	Millimeters *(mm)
⅛	3.2
¼	6.4
⅜	9.5
½	12.7
⅝	15.9
¾	19.1
⅞	22.2
1	25.4
1¼	31.8
1½	38.1
1¾	44.5
2	50.8
2½	63.5
2¾	69.9
3	76.2
3½	88.9
4	101.6

Subpart—United States Standards for Grades of Potatoes for Processing [1]

SOURCE: 48 FR 10802, Mar. 15, 1983, unless otherwise noted.

§ 51.3410 Grades.

(a) ''U.S. No. 1 Processing'' consists of potatoes which meet the following requirements:

(1) Basic requirements:

(i) Similar varietal characteristics;

(ii) Moderately firm; and,

(iii) Fairly well shaped.

(2) Free from:

(i) Freezing or freezing injury;

(ii) Blackheart;

(iii) Late Blight Tuber Rot;

(iv) Southern Bacterial Wilt;

(v) Bacterial Ring Rot;

(vi) Insects, worms or larvae;

(vii) Soft rot and wet breakdown; and,

(viii) Loose sprouts, dirt and foreign material.

(3) Free from damage by any cause.

(4) *Size.* Unless otherwise specified, individual potatoes shall be not less than 2 inches in diameter or 4 ounces in weight. Percentage(s) of a larger size(s) and/or a maximum size may be specified.

(b) ''U.S. No. 2 Processing'' consists of potatoes or usable pieces of potatoes which meet the following requirements:

(1) Basic requirements:

(i) Similar varietal characteristics;

(ii) Moderately firm; and,

(iii) Not seriously misshapen.

(2) Free from:

(i) Freezing or freezing injury;

(ii) Blackheart;

(iii) Late Blight Tuber Rot;

(iv) Southern Bacterial Wilt;

(v) Bacterial Ring Rot;

(vi) Insects, worms or larvae;

(vii) Soft rot and wet breakdown; and,

(viii) Loose sprouts, dirt and foreign material.

(3) Free from serious damage by any cause.

[1] Compliance with the provisions of these standards shall not excuse failure to comply with provisions of applicable Federal or State laws.

(4) *Size.* Unless otherwise specified, whole potatoes shall be not less than 1½ inches in diameter, or usable pieces shall be not less than 4 ounces in weight. Percentage(s) of a larger size(s) and/or maximum size may be specified.

§ 51.3411 Usable piece.

''Usable Piece'' means that portion of the potato remaining after trimming, or as it occurs in the sample:

(a) Not have any unusable material;

(b) Unless otherwise specified, weigh at least 4 ounces; and,

(c) Must have at least 50% of peel remaining after trimming.

§ 51.3412 Unusable material.

''Unusable Material'' consists of defective portions of potatoes, and potatoes which are frozen, affected by freezing injury, soft rot, wet breakdown, insects, worms, larvae, Blackheart, Late Blight Tuber Rot, Southern Bacterial Wilt, Bacterial Ring Rot, or which are seriously damaged by internal defects.

§ 51.3413 Size.

(a) The minimum size, maximum size or range in size may be specified in connection with the grade in terms of diameter or weight.

(b) Diameter means the greatest dimension in terms of inches or fractions of an inch measured at right angles to the longitudinal axis, without regard to the position of the stem-end.

(c) Weight means the minimum or maximum weight measured in terms of whole ounces. When a maximum weight is specified, the potato shall not be considered as oversize until it weighs the next higher ounce.

§ 51.3414 Application of standards.

In the application of these standards to determine the percentages of potatoes in any lot which meet the requirements of the respective grades or size categories, tolerances do not apply. However, for lots which are graded or pre-sorted for size or quality, offered for inspection and required to meet one of the grades, the following tolerances, by weight, are provided:

(a) For defects:

(1) *U.S. No. 1 Processing.* 10 percent for potatoes which fail to meet the requirements of this grade including not more than one-half of this tolerance, or 5 percent, for serious damage by any means, including therein not more than 2 percent for potatoes which are frozen or affected by soft rot or wet breakdown.

(2) *U.S. No. 2 Processing.* 10 percent for potatoes which fail to meet the requirements of this grade including not more than one-half of this tolerance, or 5 percent, for potatoes which are seriously damaged by internal defects occurring entirely within the vascular ring, including therein not more than 2 percent for potatoes which are frozen or affected by soft rot or wet breakdown.

(b) For loose sprouts, dirt and foreign material: 2 percent.

(c) For off-size:

(1) *Undersize.* 3 percent when the minimum size specified is less than 2¼ inches in diameter or less than 5 ounces in weight; and 5 percent when the minimum size specified is 2¼ inches or more in diameter or 5 ounces or more in weight.

(2) *Oversize.* 10 percent.

§ 51.3415 Definitions.

Similar varietal characteristics means that the potatoes in any lot have the same general shape, color, and character of skin and color of flesh.

Fairly well shaped means that the potato is not materially pointed, dumbbell-shaped, or otherwise deformed.[2]

Moderately firm means that the potato is not seriously shriveled or flabbly.[2]

Not seriously misshapen means that the potato is not seriously deformed and causing more than 10% waste when determining the non-peelable area directly due to shape.

Soft rot or wet breakdown means any soft, mushy or leaky condition of the

[2] USDA Visual Aid, POT-L 1 Jan 81. This publication may be examined in the Fruit and Vegetable Division, Fresh Products Branch, AMS, U.S. Department of Agriculture, South Building, Washington, DC 20250, or any field office of the Fresh Fruit and Vegetable Inspection Service. Copies of this visual aid may be purchased from the John Henry Company, P.O. Box 17099, Lansing, MI 48901 or United Fresh Fruit and Vegetable Association, N. Washington at Madison, Alexandria, VA 22314.

tissue such as Leak, slimy soft rot, wet type Fusarium Tuber Rot, or wet breakdown following freezing injury or heat injury.

Loose sprouts, dirt and foreign material means unattached sprouts or sprouts that become detached during the grading of the sample, stems, vines, adhering dirt, loose dirt, stones, trash and other extraneous material.

Damage means any defect listed in § 51.3416, or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which cannot be removed without a loss of more than 5 percent of the total weight of the potato.

Serious Damage means any defect listed in § 51.3416, or an equally objectionable variation of any of these defects, any other defect, or any combination of defects, which cannot be removed without a loss of more than 10 percent of the total weight of the potato.

External Defects are defects which can be detected externally. Cutting may be required to determine the extent of the injury.

Internal Defects are defects which cannot be detected without cutting the potato.

§ 51.3416 Classification of defects.

EXTERNAL DEFECTS

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Air cracks	5% waste	10% waste.
Blackleg	5% waste	10% waste.
Bruises	5% waste	10% waste
Cuts	Smooth, not more than 10% of surface.	Smooth, not more than ⅓ of surface.
Enlarged lenticels, discolored or sunken.	5% waste	10% waste.
Flea Beetle	5% waste	10% waste
Folded end	5% waste	10% waste.
Fusarium tuber rot	5% waste	10% waste.
Grass, wireworm	5% waste	10% waste.
Greening, light	5% waste	10% waste.
Growth cracks	See Footnote No. 2.	10% waste.
Grub	5% waste	10% waste.
Ingrown sprouts	5% waste	10% waste.
Nematodes	5% waste	10% waste.
Rhizoctonia, solid or thick mounded.	Not more than 10% of surface.	Not more than 25% of surface.
Rodent, bird damage.	5% waste	10% waste.
Scab, pitted	5% waste	10% waste.
Scab, russet	25% of surface or 5% waste.	50% of surface or 10% waste.

EXTERNAL DEFECTS—Continued

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Scab, surface	25% of surface or 5% waste.	50% of surface or 10% waste.
Scab, surface (elephant hide)	10% of surface or 5% waste.	25% of surface or 10% waste.
Second growth	5% waste	10% waste.
Scaling, surface cracks—when cracked, thick and has depth.	10% of surface or 5% waste.	25% of surface or 10% waste.
Sunburn	5% waste	10% waste.
Sunken discolored areas.	5% waste	10% waste.

INTERNAL DEFECTS

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Occurring outside of or not entirely confined to the vascular ring		
Internal Black Spot, Internal Discoloration, Vascular Browning, Fusarium Wilt, Net Necrosis, Other Necrosis, Stem End Browning.	5% waste	10% waste.
Occurring entirely within the vascular ring		
Hollow Heart or Hollow Heart with Discoloration.	Area affected not to exceed that of a circle ⅞ inch in diameter in a 10 ounce potato.[1]	Area affected not to exceed that of a circle 1¼ inches in diameter in a 10 ounce potato.[1]
Light Brown Discoloration (Brown Center).	Area affected not to exceed that of a circle ⅞ inch in diameter in a 10 ounce potato.[1]	Area afffected not to exceed that of a circle 1¼ inches in diameter in a 10 ounce potato.[1]
Internal Brown Spot and similar discoloration (Heat Necrosis).	Not more than the equivalent of 3 scattered spots ⅛ inch in diameter in a potato 6 ounces in weight or 2½ inches in diameter, or correspondingly lesser or greater number of spots in smaller or larger potatoes.	Not more than the equivalent of 6 scattered spots ⅛ inch in diameter in a potato 6 ounces in weight or 2½ inches in diameter or correspondingly lesser or greater number of spots in smaller or larger potatoes.

[1] Note: Or correspondingly lesser or greater areas in smaller or larger potatoes.

§ 51.3417 Optional test for specific gravity.

Tests to determine specific gravity shall be made in accordance with the procedures set forth in this section.

(a) The potatoes used for such determinations shall be:

(1) Taken at random from a composite sample drawn from containers representative of the lot.

(2) A comparable sample from a bulk load or storage bin.

(3) From a portion of the divided sample initially drawn or submitted for determination of grade or contract compliance.

(4) Representative of the lot with respect to size and quality.

The specific gravity for any lot of potatoes shall be the average of at least 3 corrected readings on separate tests from the composite sample. Specific gravity may also be determined, if requested, in accordance with size classifications or weighted value in proportion to size and/or grade separations in the lot.

(b) Specific gravity shall be determined by either;

(1) Calculation from the weights of the sample in air and in water made with USDA approved equipment. The reading obtained from each test shall be corrected for temperature variations using Table I.

(2) A hydrometer specifically designed for determining the specific gravity of potatoes.[3]

The pulp temperature of the potatoes and the temperature of water shall be recorded immediately before testing and the specific gravity reading corrected using Table I.

[3] The hydrometer is available from the Potato Chip/Snack Food Association, Crystal Square-3, Suite 903, 1735 Jefferson Davis Highway, Arlington, VA 22202.

TABLE I—CORRECTION FACTORS FOR SPECIFIC GRAVITY OF POTATOES [4]

[Corrected to zero at 50° F potato temperature and 50° F water temperature]

	Water temperature (degrees Fahrenheit)									
	38°	40°	45°	50°	55°	60°	65°	70°	75°	80°
Potato temperature:										
38°	−0.0021	−0.0020	−0.0018	−0.0018	−0.0020	−0.0023	−0.0029	−0.0038	−0.0047	−0.0056
40°	−.0017	−.0016	−.0014	−.0014	−.0016	−.0019	−.0025	−.0034	−.0043	−.0052
45°	−.0009	−.0008	−.0008	−.0006	−.0008	−.0011	−.0017	−.0026	−.0035	−.0044
50°	−.0003	−.0002	0000	0000	−.0002	−.0005	−.0011	−.0020	−.0029	−.0038
55°	+.0001	+.0002	+.0004	+.0004	+.0002	−.0001	−.0007	−.0016	−.0025	−.0034
60°	+.0004	+.0005	+.0007	+.0007	+.0005	+.0002	−.0004	−.0013	−.0022	−.0031
65°	+.0005	+.0006	+.0008	+.0008	+.0006	+.0003	−.0003	−.0012	−.0021	−.0030
70°	+.0006	+.0007	+.0009	+.0009	+.0007	+.0004	−.0002	−.0011	−.0020	−.0029
75°	+.0007	+.0008	+.0010	+.0010	+.0008	+.0005	−.0001	−.0010	−.0019	−.0028
80°	+.0008	+.0009	+.0011	+.0011	+.0009	+.0006	0000	−.0009	−.0018	−.0027
85°	+.0009	+.0010	+.0012	+.0012	+.0010	+.0007	+.0001	−.0008	−.0017	−.0026
90°	+.0010	+.0011	+.0013	+.0013	+.0011	+.0008	+.0002	−.0007	−.0016	−.0025
95°	+.0011	+.0012	+.0014	+.0014	+.0012	+.0009	+.0003	−.0006	−.0015	−.0024
100°	+.0012	+.0013	+.0015	+.0015	+.0013	+.0010	+.0004	−.0005	−.0014	−.0023

[4] To apply correction factor, change actual specific gravity reading by adding or subtracting the appropriate factor according to the plus or minus sign.

When requested to convert the weight in water of 5000 gram samples used in the weight in air versus weight in water method of specific gravity determinations, the conversion to total solids shall be based on Table II.

TABLE II—SPECIFIC GRAVITY CONVERSION CHART FOR 5,000 GRAMS OF POTATOES

Water weight	Specific gravity	Total solids
300	1.0638	17.2
310	1.0661	17.7
320	1.0684	18.2
322	1.0688	18.3
324	1.0693	18.4
326	1.0697	18.5
328	1.0702	18.6
330	1.0707	18.7
332	1.0711	18.8
334	1.0716	18.9
336	1.0720	19.0
338	1.0725	19.1
340	1.0730	19.2
342	1.0734	19.3
344	1.0739	19.4
346	1.0743	19.5
348	1.0748	19.6
350	1.0753	19.7
352	1.0757	19.8
354	1.0762	19.9
356	1.0766	20.0
358	1.0771	20.1
360	1.0776	20.2
362	1.0780	20.3
364	1.0785	20.4
366	1.0790	20.5
368	1.0794	20.6
370	1.0799	20.7
372	1.0804	20.8
374	1.0808	20.9
376	1.0813	21.0
378	1.0818	21.1
380	1.0822	21.2
382	1.0827	21.3
384	1.0832	21.4
386	1.0836	21.5
388	1.0841	21.6
390	1.0846	21.7
392	1.0851	21.8
394	1.0855	21.9
396	1.0860	22.0
398	1.0865	22.1
400	1.0870	22.2
402	1.0874	22.3
404	1.0879	22.4
406	1.0884	22.5
408	1.0888	22.6
410	1.0893	22.7
412	1.0898	22.8
414	1.0903	22.9
416	1.0908	23.0
418	1.0912	23.1
420	1.0917	23.2
422	1.0922	23.4
424	1.0926	23.5
426	1.0931	23.6
428	1.0936	23.7
430	1.0941	23.8
432	1.0946	23.9
440	1.0965	24.4
450	1.0989	24.9

TABLE II—SPECIFIC GRAVITY CONVERSION CHART FOR 5,000 GRAMS OF POTATOES—Continued

Water weight	Specific gravity	Total solids
460	1.1013	25.4
470	1.1040	26.0

Whenever the recorded water weight for an individual reading falls between two sets of numbers as indicated in Table II, the next higher reading shall be used.

§ 51.3418 Optional test for fry color.

Fry color may be determined in accordance with contract specifications by using the Munsell Color Standards for Frozen French Fried Potatoes, Third Edition, 1972, 64–1.[5] Select a minimum of twenty (20) potatoes at random from the official sample. Slice each potato from stem to blossom-end into ½ square inch strips. Unless otherwise specified, fry center cut strips in oil for a minimum of 3 minutes at 350°F or 2½ minutes at 375°F.

Subpart—United States Standards for Grades of Honey Dew and Honey Ball Type Melons

SOURCE: 32 FR 3213, Feb. 24, 1967, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981.

GRADES

§ 51.3740 U.S. No. 1.

''U.S. No. 1'' consists of honey dew or honey ball type melons which are mature, firm, well formed, which are free from decay, and free from damage caused by dirt, aphis stain, rust spots, bruises, cracks, broken skin, sunscald, sunburn, hail, moisture, insects, disease, or other means. (See § 51.3744.)

§ 51.3741 U.S. Commercial.

''U.S. Commercial'' consists of honey dew or honey ball type melons which meet the requirements of U.S. No. 1

[5] Munsell Color Standards for Frozen French Fried Potatoes, Third Edition, 1972, 64–1, may be purchased from the Munsell Color Co., 2441 North Calvert St., Baltimore, MD 21218.

grade except for the increased tolerances for defects. (See § 51.3744.)

§ 51.3742 U.S. No. 2.

''U.S. No. 2'' consists of honey dew or honey ball type melons which are mature, firm, fairly well formed, free from decay and free from serious damage by any cause. (See § 51.3744.)

UNCLASSIFIED

§ 51.3743 Unclassified.

''Unclassified'' consists of melons which have not been classified in accordance with any of the foregoing grades. The term ''unclassified'' is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.3744 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

(a) *U.S. No. 1.* 10 percent for melons in any lot which fail to meet the requirements of the grade: *Provided,* That not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for melons affected by decay.

(b) *U.S. Commercial.* 20 percent for melons in any lot which fail to meet the requirements of this grade: *Provided,* That not more than one-fourth of this amount, or 5 percent, shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for melons affected by decay.

(c) *U.S. No. 2.* 10 percent for melons in any lot which fail to meet the requirements of this grade including not more than 1 percent for melons affected by decay.

APPLICATION OF TOLERANCES

§ 51.3745 Application of tolerances.

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

(a) For a tolerance of 10 percent or more, individual packages shall have not more than 1½ times the tolerance specified: *Provided,* That when the package contains 15 specimens or less, any individual package shall have not more than double the tolerance specified, except that at least one defective specimen may be permitted in any package: *And provided further,* That the averages for the entire lot are within the tolerances specified for the grade.

(b) For a tolerance of less than 10 percent, individual packages in any lot shall have not more than double the tolerance specified, except that at least one defective specimen may be permitted in any package: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade.

DEFINITIONS

§ 51.3746 Mature.

Mature means that the melon has reached the stage of maturity which will insure the proper completion of the normal ripening process.

§ 51.3747 Well formed.

Well formed means that the melon has the normal shape characteristic of the variety.

§ 51.3748 Damage.

Damage means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the melon.

(a) The following specific defects shall be considered as damage:

(1) Sunburn which causes the rind to become brownish in color, hard, tough, or thin; and,

(2) Bruising when the size or color of the affected area materially detracts from the appearance.

(b) The following blemishes shall not be considered as damage:

(1) Slight bruising caused by light pressure of the weight of other melons or from lidding of the crate;

(2) Yellow spots;

(3) Superficial hail spots;

(4) Slight surface scratches caused by picking or packing; or,

(5) Netting, either raised or occurring as very shallow cracks in the skin.

§ 51.3749 Serious damage.

Serious damage means any defect or any combination of defects which seriously detracts from the appearance, or the edible or marketing quality of the melon.

PART 52—PROCESSED FRUITS AND VEGETABLES, PROCESSED PRODUCTS THEREOF, AND CERTAIN OTHER PROCESSED FOOD PRODUCTS [1]

NOTE: Compliance with the provisions of the standards set forth in this part shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act (or with applicable State laws and regulations).

Subpart—Regulations Governing Inspection and Certification

Sec.
52.1 Administration of regulations.

DEFINITIONS

52.2 Terms defined.
52.3 Designation of official certificates, memoranda, marks, other identifications, and devices for purposes of the Agricultural Marketing Act.

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52.12 Disposition of inspected sample.
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52.44 Inspection fees when charges for sampling have been collected.
52.45 Inspection fees when charges for sampling have not been collected.
52.46 Fee for appeal inspection.
52.47 Changing types of service.
52.48 Charges for plant survey and inspection.

[1] Among such other processed food products are the following: Honey; molasses, except for stockfeed; nuts and nut products, except oil; sugar (cane, beet, and maple); sirups (blended), sirups, except from grain; tea; cocoa; coffee; spices; condiments.

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52.50 Travel and other expenses.
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MISCELLANEOUS

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52.81 Plant survey.
52.82 Basis of survey and plant inspection.
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52.722 Styles.
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52.773 Liquid media and Brix measurements.

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52.782 Allowances for quality factors.

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52.784 Score sheet for canned red tart pitted cherries.

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52.812 Score sheet for frozen red tart pitted cherries.

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TYPE III—RAISINS WITH SEEDS

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52.1851 Sizes of raisins with seeds—layer or cluster.
52.1852 Grades of raisins with seeds—except layer or cluster.
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52.1854 Sizes of Sultana raisins.
52.1855 Grades of Sultana raisins.

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52.1856 Sizes of zante currant raisins.
52.1857 Grades of zante currant raisins.

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AUTHORITY: 7 U.S.C. 1621–1627.

Subpart—Regulations Governing Inspection and Certification

SOURCE: 22 FR 3535, May 22, 1957, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

§ 52.1 Administration of regulations.

(a) The Administrator, Agricultural Marketing Service, United States Department of Agriculture is charged with the administration of the regulations in this part except that he may delegate any or all of such functions to any officer or employee of the Agricultural Marketing Service of the Department, in his discretion.

(b) All services provided under the regulations of this part, including the hiring and licensing of inspection, grading, and sampling personnel shall be conducted without discrimination because of race, color, sex, religion, or national origin.

[22 FR 3535, May 22, 1957, as amended at 38 FR 25166, Sept. 12, 1973. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

DEFINITIONS

§ 52.2 Terms defined.

Words in the regulations in this part in the singular form shall be deemed to import the plural and vice versa, as the case may demand. For the purposes of the regulations in this part, unless the context otherwise requires, the following terms shall have the following meanings:

Acceptance number. ''Acceptance number'' means the number in a sampling plan that indicates the maximum number of deviants permitted in a sample of a lot that meets a specific requirement.

Act. ''Act'' means the applicable provisions of the Agricultural Marketing Act of 1946 (60 Stat. 1087 et seq., as amended; 7 U.S.C. 1621 et seq.), or any other act of Congress conferring like authority.

Administrator. ''Administrator'' means the Administrator of the Agricultural Marketing Service.

Applicant. ''Applicant'' means any interested party who requests inspection service under the regulations in this part.

Approved plant. See ''Plant, approved''.

Case. ''Case'' means the number of containers (cased or uncased) which, by the particular industry are ordinarily packed in a shipping container.

Case or shipping case. ''Case'' or ''shipping case'' means a unit consisting of a given number of primary containers of the same size, the number and arrangement per unit conforming to customary trade practice. For products not physically assembled into a shipping case (i.e. stacked bright) *case* means simulating the containers in such lot into a unit consisting of the same number of primary containers corresponding to customary trade practice (or corresponding to the unit as defined above).

Certificate of loading. Certificate of loading means a statement, either written or printed, issued pursuant to the regulations in this part, relative to checkloading of a processed product subsequent to inspection thereof. The certificate of loading may be issued in lieu of an official inspection certificate when the same inspection procedures are applied and when authorized by the Administrator.

Certificate of sampling. ''Certificate of sampling'' means a statement, either written or printed issued pursuant to the regulations in this part, identifying officially drawn samples and may include a description of condition of containers and the condition under which the processed product is stored.

Class. See ''Grade.''

Condition. ''Condition'' means the degree of soundness of the product which

may affect its merchantability and includes, but is not limited to those factors which are subject to change as a result of age, improper preparation and processing, improper packaging, improper storage or improper handling.

Department. ''Department'' means the United States Department of Agriculture.

Deviant. ''Deviant'' means a sample unit affected by one or more deviations or a sample unit that varies in a specifically defined manner from the requirements of a standard, specification, or other inspection document.

Deviation. ''Deviation'' means any specifically defined variation from a particular requirement.

Grade or *class.* ''Grade'' or ''class'' designates a level or rank of quality.

Grader. See ''Inspector''.

In-plant sampler. In-plant sampler means any employee of the Department authorized by the Administrator to draw samples of processed products and perform a limited number of miscellaneous duties in a plant operating under contract.

Inspection certificate. ''Inspection certificate'' means a statement, either written or printed, issued pursuant to the regulations in this part, setting forth in addition to appropriate descriptive information relative to a processed product, and the container thereof, the quality and condition, or any part thereof, of the product and may include a description of the conditions under which the product is stored.

Inspection service. (See *Inspection service, general below.*)

Inspection service, general:

(a) The sampling pursuant to the regulations in this part;

(b) The determination pursuant to the regulations in this part of:

(1) Essential characteristics such as style, type, size, sirup density or identity of any processed product which differentiates between major groups of the same kind;

(2) The class, quality and condition of any processed product, including the condition of the container thereof by the examination of appropriate samples;

(c) The issuance of any certificate of sampling, inspection certificates, or certificates of loading of a processed product, or any report relative to any of the foregoing; or

(d) Performance by an inspector of any related services such as observing the preparation of the product from its raw state through each step in the entire process; observing conditions under which the product is prepared, processed, and packed; or observing plant sanitation as a prerequisite to the inspection of the processed product, either on a continuous or periodic basis, or checkloading the inspected processed product in connection with the distribution or marketing thereof.

Inspection Service; types of. (a) *Lot inspection* means the inspection and grading of specific lots of processed fruits and vegetables which are located in plant warehouses, commercial storage, railway cars, trucks, or any other conveyance or storage facility.

(b) *Approved plant-lot inspection* means the inspection and grading of specific lots of processed fruits and vegetables which are located in plant warehouses, commercial storage, railway cars, trucks, or any other conveyance or storage facility. However, under ''approved plant-lot inspection'', the inspection service has knowledge that the products were processed or packaged in plants meeting the ''plant approved'' definition. This means that the plant facilities, sanitation, and methods of operation have been surveyed and approved for specific product(s) by the Administrator as suitable and adequate for inspection or grading service in accordance with § 52.81 through § 52.83 of this part.

(c) *Continuous inspection* is the conduct of inspection and grading services in an approved plant whereby one or more inspector(s) are present at all times the plant is in operation to make in-process checks on the preparation, processing, packing, and warehousing of all products under contract and to assure compliance with sanitary requirements.

(d) *Pack certification* is the conduct of inspection and grading services in an approvement plant whereby one or more inspector(s) may make inspection of the preparation and processing of products under contract, but are not

required to be present at all times the plant is in operation.

(1) Under a Designated Lot-contract, inspector(s) will grade and certify only those lots designated by the applicant.

(2) Under a Quality Assurance contract, inspector(s) will use information available from the applicant's quality control records to certify lots, as requested, and will grade lots at random as often as necessary to verify the reliability of the applicant's quality control system.

Inspector or grader. ''Inspector'' or ''grader'' means any employee of the Department authorized by the Secretary or any other person licensed by the Secretary to investigate, sample, inspect, and certify in accordance with the regulations in this part to any interested party the class, quality and condition of processed products covered in this part and to perform related duties in connection with the inspection service.

Inspector in charge. ''Inspector in Charge'' means any inspector designated on a plant working shift or in a field office laboratory as the inspector in charge of the inspection work when authorized by the Administrator to act in that capacity.

Inspector, subordinate. ''Subordinate inspector'' means any inspector assigned to a plant or field office to work under the direction of an inspector-in-charge.

Inspector's aide. ''Inspector's aide'' means any employee of the Department authorized to perform a limited number and type of duties under the close supervision of an inspector.

Interested party. ''Interested party'' means any person who has a financial interest in the commodity involved.

Licensed sampler. ''Licensed sampler'' means any person who is authorized by the Secretary to draw samples of processed products for inspection service, to inspect for identification and condition of containers in a lot, and may, when authorized by the Administrator, perform related services under the act and the regulations in this part.

Lot. Lot means any number of containers of the same size and type which contain a processed product of the same type and style located in the same warehouse or conveyance, and which is available for inspection service at any time: Provided, that the number of containers comprising lot may not exceed the maximum number specified in the sampling plans in § 52.38 of this Subpart: And further provided that:

(a) If the applicant requests a separate inspection certificate covering a specific portion of a lot, such portion must be separately marked or otherwise identified in such a manner as to permit sampling, inspection, and certification of such portion as a separate lot; and

(b) Under in-plant (in-process) inspection, the inspector is authorized to limit the number of containers of a processed product that may be included in a lot to a period of consecutive production equivalent to one production shift with a maximum of 24 hours of consecutive production.

Officially drawn sample. ''Officially drawn sample'' means any sample that has been selected from a particular lot by an inspector, licensed sampler, or by any other person authorized by the Administrator pursuant to the regulations in this part.

Person. ''Person'' means any individual, partnership, association, business trust, corporation, any organized group of persons (whether incorporated or not), the United States (including, but not limited to, any corporate agencies thereof), any State, county, or municipal government, any common carrier, and any authorized agent of any of the foregoing.

Plant. ''Plant'' means the premises, buildings, structure, and equipment (including, but not being limited to machines, utensils, vehicles, and fixtures located in or about the premises) used or employed in the preparation, processing, handling, transporting and storage of fruits and vegetables, or the processed products thereof.

Plant, approved. ''Approved plant'' means any plant in which the facilities, sanitation, and methods of operation have been surveyed and approved for specific product(s) by the Administrator as suitable and adequate for inspection or grading service in accordance with §§ 52.81 through 52.83.

Processed product. ''Processed product'' means any fruit, vegetable, or

other food product covered under the regulations in this part which has been preserved by any recognized commercial process, including, but not limited to canning, freezing, dehydrating, drying, the addition of chemical substances, or by fermentation.

Quality. ''Quality'' means the inherent properties of any processed product which determine the relative degree of excellence of such product, and includes the effects of preparation and processing, and may or may not include the effects of packing media, or added ingredients.

Rejection number. ''Rejection number'' means the number in a sampling plan that indicates the minimum number of deviants in a sample that will cause a lot to fail a specific requirement.

Sample. ''Sample'' means any number of sample units to be used for inspection.

Sample unit. ''Sample unit'' means a container and/or its entire contents, a portion of the contents of one or more containers or other unit of commodity, or a composite mixture of a product used for inspection.

Sampling. ''Sampling'' means the act of selecting samples of processed products for the purpose of inspection under the regulations in this part.

Secretary. ''Secretary'' means the Secretary of the Department or any other officer or employee of the Department authorized to exercise the powers and to perform the duties of the Secretary in respect to the matters covered by the regulations in this part.

Shipping container. ''Shipping container'' means an individual container designed for shipping a number of packages or cans ordinarily packed in a container for shipping or designed for packing unpackaged processed products for shipping.

Unofficial sample. Unofficial sample means any sample that has been selected by any person other than an inspector or licensed sampler, or by any other person not authorized by the Administrator pursuant to the regulations in this part.

[22 FR 3535, May 22, 1957, as amended at 33 FR 9582, July 2, 1968; 35 FR 14061, Sept. 4, 1970; 38 FR 25166, Sept. 12, 1973; 38 FR 26903, Sept. 27, 1973; 40 FR 48934, Oct. 20, 1975. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981, and further amended at 51 FR 20438, June 5, 1986; 58 FR 42413, Aug. 9, 1993]

§ 52.3 Designation of official certificates, memoranda, marks, other identifications, and devices for purposes of the Agricultural Marketing Act.

Subsection 203(h) of the Agricultural Marketing Act of 1946, as amended by Pub. L. 272, 84th Congress, provides criminal penalties for various specified offenses relating to official certificates, memoranda, marks or other identifications, and devices for making such marks or identifications, issued or authorized under section 203 of said act, and certain misrepresentations concerning the inspection or grading of agricultural products under said section. For the purposes of said subsection and the provisions in this part, the terms listed below shall have the respective meanings specified:

Official certificate. ''Official certificate'' means any form of certification, either written or printed, including those defined in § 52.2, used under this part to certify with respect to the inspection, class, grade, quality, size, quantity, or condition of products (including the compliance of products with applicable specifications).

Official device. ''Official device'' means a stamping appliance, branding device, stencil, printed label, or any other mechanically or manually operated tool that is approved by the Administrator for the purpose of applying any official mark or other identification to any product or the packaging material thereof; or any device approved and designated by the Administrator as a USDA official device for use as a color standard, defect guide, or other similar aid to interpret the United States Department of Agriculture grade standards and to facilitate conduct of the inspection service.

Official identification. ''Official identification'' means any United States (U.S.) standard designation of class, grade, quality, size, quantity, or condition specified in this part or any symbol, stamp, label, or seal indicating that the product has been graded or inspected and/or indicating the class, grade, quality, size, quantity, or condition of the product approved by the Administrator and authorized to be affixed to any product, or affixed to or printed on the packaging material of any product.

Official mark. ''Official mark'' means the grade mark, inspection mark, combined form of inspection and grade mark, and any other mark, or any variations in such marks, including those prescribed in §52.53 approved by the Administrator and authorized to be affixed to any product, or affixed to or printed on the packaging material of any product, stating that the product was graded or inspected or both, or indicating the appropriate U.S. Grade or condition of the product, or for the purpose of maintaining the identity of products graded or inspected or both under this part.

Official memorandum. ''Official memorandum'' means any initial record of findings made by an authorized person in the process of grading, inspecting, or sampling pursuant to this part, any processing or plant-operation report made by an authorized person in connection with grading, inspecting, or sampling under this part, and any report made by an authorized person of services performed pursuant to this part.

[22 FR 3535, May 22, 1957, as amended at 23 FR 4999, July 1, 1958. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

INSPECTION SERVICE

§52.4 Where inspection service is offered.

Inspection service may be furnished wherever any inspector or licensed sampler is available and the facilities and conditions are satisfactory for the conduct of such service.

§52.5 Who may obtain inspection service.

An application for inspection service may be made by any interested party, including, but not limited to, the United States and any instrumentality or agency thereof, any State, county, municipality, or common carrier, and any authorized agent in behalf of the foregoing.

§52.6 How to make application.

An application for inspection service may be made to the office of inspection or to any inspector, at or nearest the place where the service is desired. An up-to-date list of the Inspection Field Offices of the Department may be obtained upon request to the Administrator. Satisfactory proof that the applicant is an interested party shall be furnished.

§52.7 Information required in connection with application.

(a) Application for inspection service shall be made in the English language and may be made orally (in person or by telephone), in writing, or by telegraph. If an application for inspection service is made orally, written confirmation may be required by the inspection service involved.

(b) In connection with each application for inspection service, there shall be furnished such information as may be necessary to perform an inspection on the processed product(s), including but not limited to, the name of the product, name and address of the packer or plant where such product was packed, the location of the product, its lot or car number, codes or other identification marks, the number of containers, the type and size of the containers, the interest of the applicant in the product, whether the lot has been inspected previous to the application by any Federal agency and the purpose for which inspection is desired.

[51 FR 20439, June 5, 1986]

§52.8 Filing of application.

An application for inspection service shall be regarded as filed only when made in accordance with the regulations in this part.

§ 52.9 Record of filing time.

A record showing the date when each application for inspection or for an appeal inspection is received shall be maintained.

[51 FR 20439, June 5, 1986]

§ 52.10 When application may be rejected.

An application for inspection service may be rejected by the Administrator (a) for non-compliance by the applicant with the regulations in this part, (b) for non-payment for previous inspection services rendered, (c) when the product is not properly identifiable by code or other marks, or (d) when it appears that to perform the inspection service would not be to the best interests of the Government. Such applicant shall be promptly notified of the reason for such rejection.

§ 52.11 When application may be withdrawn.

An application for inspection service may be withdrawn by the applicant at any time before the inspection is performed: *Provided,* That, the applicant shall pay at the hourly rate prescribed in § 52.42 for the time incurred by the inspector in connection with such application, any travel expenses, telephone, telegraph or other expenses which have been incurred by the inspection service in connection with such application.

[22 FR 3535, May 22, 1957, as amended at 38 FR 25166, Sept. 12, 1973. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§ 52.12 Disposition of inspected sample.

Any sample of a processed product that has been used for inspection may be returned to the applicant, at his request and expense; otherwise it shall be destroyed, or disposed of to a charitable institution.

§ 52.13 Basis of inspection and grade or compliance determination

(a) Inspection service shall be performed on the basis of the appropriate United States standards for grades of processed products, Federal, Military, Veterans Administration or other government agency specifications, written contract specifications, or any written specification or instruction which is approved by the Administrator.

(b) Unless otherwise approved by the Administrator, compliance with such grade standards, specifications, or instructions shall be determined by evaluating the product, or sample, in accordance with the requirements of such standards, specifications or instructions: *Provided,* That when inspection for quality is based on any U.S. grade standard which contains a scoring system, the grade to be assigned to a lot is the grade indicated by the average of the total of the scores of the respective sample units: *Provided further,* That—

(1) Such sample complies with the applicable standards of quality promulgated under the Federal Food, Drug, and Cosmetic Act;

(2) Such sample complies with the product description;

(3) Such sample meets the indicated grade with respect to factors of quality which are not rated by score points; and

(4) With respect to those factors of quality which are rated by score points, each of the following requirements is met:

(i) None of the sample units falls more than one grade below the indicated grade because of any quality factor to which a limiting rule applies;

(ii) None of the sample units falls more than 4 score points below the minimum total score for the indicated grade;

(iii) The number of deviants does not exceed the applicable acceptance number indicated in the sampling plans contained in § 52.38 (''deviants'', as used in this paragraph, means sample units that fall into the next grade below the indicated grade but do not score more than 4 points below the minimum total score for the indicated grade);

(5) If any of the provisions contained in paragraphs (b) (3) and (4) of this section are not met, the grade is determined by considering such provisions in connection with succeedingly lower grades until the grade of the lot, if assignable, is established; and

(6) When it is determined that a portion of a lot bearing a particular identification mark is of lower quality or

deficient in other factors, the grade or compliance of the lot shall be no higher than that of the portion bearing the particular identification mark.

[22 FR 3535, May 22, 1957, as amended at 33 FR 9582, July 2, 1968. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§52.14 Order of inspection service.

Inspection service shall be performed, insofar as practicable, in the order in which applications therefor are made except that precedence may be given to any such applications which are made by the United States (including, but not being limited to, any instrumentality or agency thereof) and to any application for an appeal inspection.

§52.15 Postponing inspection service.

If the inspector determines that it is not possible to accurately ascertain the quality or condition of a processed product immediately after processing because the product has not reached equilibrium in color, sirup density, or drained weight, or for any other substantial reason, he may postpone inspection service for such period as may be necessary.

§52.16 Financial interest of inspector.

No inspector shall inspect any processed product in which he is directly or indirectly financially interested.

§52.17 Forms of certificates.

Inspection certificates, certificates of sampling or loading, and other memoranda concerning inspection service shall be issued on forms approved by the Administrator.

§52.18 Issuance of certificates.

(a) The person signing and issuing the certificate shall be one of the following:

(1) The inspector who performed the inspection.

(2) Another employee of the Inspection Service who has been given power of attorney by the inspector who performed the inspection and authorized by the Administrator to affix the inspector's signature to an inspection certificate.

(3) An inspector designated as the ''inspector in charge,'' when the certificate represents composite inspection of several persons.

In all cases the inspection certificate shall be prepared in accordance with the facts set forth in the official memoranda made by the inspector or inspectors in connection with the inspection. Whenever a certificate is signed by a person under a power of attorney the certificate should so indicate. The signature of the holder of the power shall appear under the name of the inspector who personally inspected the product, and whenever a certificate issued is signed by an inspector in charge that title must appear in connection with the signature.

(b) A certificate of loading shall be issued and signed by the inspector or licensed sampler authorized to check the loading of a specific lot of processed products: *Provided,* That, another employee of the inspection service may sign such certificate of loading covering any processed product checkloaded by an inspector or licensed sampler when given power of attorney by such inspector or licensed sampler and authorized by the Administrator to affix the inspector's or licensed sampler's signature to a certificate of loading which has been prepared in accordance with the facts set forth in the notes made by the inspector or licensed sampler in connection with the checkloading of a specific lot of processed products.

[22 FR 3535, May 22, 1957, as amended at 35 FR 14061, Sept. 4, 1970. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§52.19 Issuance of corrected certificates.

A corrected inspection certificate may be issued by the inspector who issued the original certificate after distribution of a certificate if errors, such as incorrect dates, code marks, grade statements, lot or car numbers, container sizes, net or drained weights, quantities, or errors in any other pertinent information require the issuance of a corrected certificate. Whenever a corrected certificate is issued, such certificate shall supersede the inspection certificate which was issued in

error and the superseded certificate shall become null and void after the issuance of the corrected certificate.

§ 52.20 Issuance of an inspection report in lieu of an inspection certificate.

A letter report in lieu of an inspection certificate may be issued by an inspector when such action appears to be more suitable than an inspection certificate: *Provided,* That, the issuance of such report is approved by the Administrator.

§ 52.21 Disposition of inspection certificates.

The original of any inspection certificate, issued under the regulations in this part, and not to exceed four copies thereof, if requested prior to issuance, shall be delivered or mailed promptly to the applicant, or person designated by the applicant. All other copies shall be filed in such manner as the Administrator may designate. Additional copies of any such certificates may be supplied to any interested party as provided in § 52.50.

§ 52.22 Report of inspection results prior to issuance of formal report.

Upon request of any interested party, the results of an inspection may be telegraphed or telephoned to him, or to any other person designated by him, at his expense.

APPEAL INSPECTION

§ 52.23 When appeal inspection may be requested.

An application for an appeal inspection may be made by any interested party who is dissatisfied with the results of an inspection as stated in an inspection certificate, if the lot of processed products can be positively identified by the inspection service as the lot from which officially drawn samples were previously inspected. Such application shall be made within thirty (30) days following the day on which the previous inspection was performed, except upon approval by the Administrator the time within which an application for appeal inspection may be made may be extended.

§ 52.24 Where to file for an appeal inspection and information required.

(a) Application for an appeal inspection may be filed with:

(1) The supervisor in the office that issued the inspection certificate on which the appeal covering the processed product is requested; or

(2) The inspector in charge of the office of inspection at or nearest the place where the processed product is located.

(b) The application for appeal inspection shall state the location of the lot of processed products and the reasons for the appeal; and date and serial number of the certificate covering inspection of the processed product on which the appeal is requested, and such application may be accompanied by a copy of the previous inspection certificate and any other information that may facilitate inspection. Such application may be made orally (in person or by telephone), in writing, or by telegraph. If made orally, written confirmation shall be made promptly.

[22 FR 3535, May 22, 1957. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981, and amended at 51 FR 20439, June 5, 1986]

§ 52.25 When an application for an appeal inspection may be withdrawn.

An application for appeal inspection may be withdrawn by the applicant at any time before the appeal inspection is performed: *Provided,* That, the applicant shall pay at the hourly rate prescribed in § 52.42, for the time incurred by the inspector in connection with such application, any travel expenses, telephone, telegraph, or other expenses which have been incurred by the inspection service in connection with such application.

[22 FR 3535, May 22, 1957, as amended at 38 FR 25166, Sept. 12, 1973. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§ 52.26 When appeal inspection may be refused.

An application for an appeal inspection may be refused if:

(a) The reasons for the appeal inspection are frivolous or not substantial;

(b) The quality or condition of the processed product has undergone a material change since the inspection covering the processed product on which the appeal inspection is requested;

(c) The lot in question is not, or cannot be made accessible for the selection of officially drawn samples;

(d) The lot relative to which appeal inspection is requested cannot be positively identified by the inspector as the lot from which officially drawn samples were previously inspected; or

(e) There is noncompliance with the regulations in this part. Such applicant shall be notified promptly of the reason for such refusal.

§52.27 Who shall perform appeal inspection.

An appeal inspection shall be performed by an inspector or inspectors (other than the one from whose inspection the appeal is requested) authorized for this purpose by the Administrator and, whenever practical, such appeal inspection shall be conducted jointly by two such inspectors: *Provided,* That, the inspector who made the inspection on which the appeal is requested may be authorized to draw the samples when another inspector or licensed sampler is not available in the area where the product is located.

§52.28 Appeal inspection certificate.

After an appeal inspection has been completed, the lot(s) cannot be further appealed unless authorized by the Administrator. An appeal inspection certificate shall be issued, showing the results of such appeal inspection; and such certificate shall supersede the inspection certificate previously issued for the processed product involved. Each appeal inspection certificate shall clearly identify the number and date of the inspection certificate which it supersedes. The superseded certificate shall become null and void upon the issuance of the appeal inspection certificate and shall no longer represent the quality or condition of the processed product described therein. The inspector or inspectors issuing an appeal inspection certificate shall forward notice of such issuance to such persons as he considers necessary to prevent misuse of the superseded certificate if the original and all copies of such superseded certificate have not previously been delivered to the inspector or inspectors issuing the appeal inspection certificate. The provisions in the regulations in this part concerning forms and certificates, issuance of certificates, and disposition of certificates shall apply to appeal inspection certificates, except that copies of such appeal inspection certificates shall be furnished to all interested parties who received copies of the superseded certificate.

[51 FR 20439, June 5, 1986]

LICENSING OF SAMPLERS AND INSPECTORS

§52.29 Who may become licensed sampler.

Any person deemed to have the necessary qualifications may be licensed as a licensed sampler to draw samples for the purpose of inspection under the regulations in this part. Such a license shall bear the printed signature of the Secretary, and shall be countersigned by an authorized employee of the Department. Licensed samplers shall have no authority to inspect processed products under the regulations in this part except as to identification and condition of the containers in a lot. A licensed sampler shall perform his duties pursuant to the regulations in this part as directed by the Administrator.

§52.30 Application to become a licensed sampler.

Application to become a licensed sampler shall be made to the Administrator on forms furnished for that purpose. Each such application shall be signed by the applicant in his own handwriting, and the information contained therein shall be certified by him to be true, complete, and correct to the best of his knowledge and belief, and the application shall contain or be accompanied by:

(a) A statement showing his present and previous occupations, together with names of all employers for whom he has worked, with periods of service, during the ten years previous to the date of his application;

(b) A statement that, in his capacity as a licensed sampler, he will not draw

samples from any lot of processed products with respect to which he or his employer is an interested party;

(c) A statement that he agrees to comply with all terms and conditions of the regulations in this part relating to duties of licensed samplers; and

(d) Such other information as may be requested.

§ 52.31 Inspectors.

Inspections will ordinarily be performed by employees under the Administrator who are employed as Federal Government employees for that purpose. However, any person employed under any joint Federal-State inspection service arrangement may be licensed, if otherwise qualified, by the Secretary to make inspections in accordance with this part on such processed products as may be specified in his license. Such license shall be issued only in a case where the Administrator is satisfied that the particular person is qualified to perform adequately the inspection service for which such person is to be licensed. Each such license shall bear the printed signature of the Secretary and shall be countersigned by an authorized employee of the Department. An inspector shall perform his duties pursuant to the regulations in this part as directed by the Administrator.

§ 52.32 Suspension or revocation of license of licensed sampler or licensed inspector.

Pending final action by the Secretary, the Administrator may, whenever he deems such action necessary, suspend the license of any licensed sampler, or licensed inspector, issued pursuant to the regulations in this part, by giving notice of such suspension to the respective licensee, accompanied by a statement of the reasons therefor. Within seven days after the receipt of the aforesaid notice and statement of reasons by such licensee, he may file an appeal, in writing, with the Secretary supported by any argument or evidence that he may wish to offer as to why his license should not be suspended or revoked. After the expiration of the aforesaid seven days period and consideration of such argument and evidence, the Secretary shall take such action as he deems appropriate with respect to such suspension or revocation.

§ 52.33 Surrender of license.

Upon termination of his services as a licensed sampler or licensed inspector, or suspension or revocation of his license, such licensee shall surrender his license immediately to the office of inspection serving the area in which he is located. These same provisions shall apply in a case of an expired license.

SAMPLING

§ 52.34 How samples are drawn by inspectors or licensed samplers.

An inspector or a licensed sampler shall select samples, upon request, from designated lots of processed products which are so placed as to permit thorough and proper sampling in accordance with the regulations in this part. Such person shall, unless otherwise directed by the Administrator, select sample units of such products at random, and from various locations in each lot in such manner and number, not inconsistent with the regulations in this part, as to secure a representative sample of the lot. Samples drawn for inspection shall be furnished by the applicant at no cost to the Department.

§ 52.35 Accessibility for sampling.

Each applicant shall cause the processed products for which inspection is requested to be made accessible for proper sampling. Failure to make any lot accessible for proper sampling shall be sufficient cause for postponing inspection service until such time as such lot is made accessible for proper sampling.

§ 52.36 How officially drawn samples are to be identified.

Officially drawn samples shall be marked by the inspector or licensed sampler so such samples can be properly identified for inspection.

§ 52.37 How official samples are to be identified and shipped.

Unless otherwise directed by the Administrator, samples which are to be shipped to any office of inspection

shall be forwarded to the office of inspection serving the area in which the processed products from which the samples were drawn is located. Such samples shall be shipped in a manner to avoid any material change in the quality or condition of the sample of the processed product. Containers shall be identified and properly sealed with tape. A facsimile of the ''Officially Sampled'' stamp shall be placed over the taped container. All transportation charges in connection with such shipments of samples shall be at the expense of the applicant.

[51 FR 20439, June 5, 1986]

§52.38 Sampling plans and procedures for determining lot compliance.

(a) Except as otherwise provided for in this section in connection with in-plant inspection and unless otherwise approved by the Administrator, samples shall be selected from each lot in the exact number of sample units indicated for the lot size in the applicable sampling plans. The lot size is to correspond to a sample size with a maximum of 29 sample units: Provided, that at the discretion of the inspection service, the number of sample units selected may be increased to the exact number of sample units indicated for any one of the larger sample sizes provided for in the appropriate plans. The samples size may be increased beyond 29 sample units in accordance with the following sampling plan:

Sample Size	38	48	60
Acceptance Number	5	6	7

(b) Under the sampling plans with respect to any specified requirement:

(1) If the number of deviants (as defined in connection with the specific requirement) in the sample does not exceed the acceptance number prescribed for the sample size, the lot meets the requirement;

(2) If the number of deviants (as defined in connection with the specific requirement) in the sample exceeds the acceptance number prescribed for the sample size, the lot fails the requirement.

(c) If in the conduct of on-line in-plant inspection of a product covered by a grade standard which does not contain sampling plans, the sample is examined before the lot size is known and the number of sample units exceeds the prescribed sample size for such lot, but does not equal any of the prescribed larger sample sizes, the lot may be deemed to meet or fail a specific requirement in accordance with the following procedure:

(1) If the number of deviants (as defined in connection with the specific requirement) in the nonprescribed sample does not exceed the acceptance number of the next smaller sample size, the lot meets the requirement;

(2) If the number of deviants (as defined in connection with the specific requirement) in the nonprescribed sample equals the acceptance number prescribed for the next larger sample size, additional sample units shall be selected to increase the sample to the next larger prescribed sample size;

(3) If the number of deviants (as defined in connection with the specific requirement) in the nonprescribed sample exceeds the acceptance number prescribed for the next larger sample size, the lot fails the requirement.

(d) In the conduct of on-line in-plant inspection, sampling may be performed on a time interval basis. The sampling frequency shall be specified in an applicable grade standard or other procedural instruction approved by the Administrator.

(e) In the event that the lot compliance determination provisions of a standard or specification are based on the number of specified deviations instead of deviants the procedures set forth in this section may be applied by substituting the word ''deviation'' for the word ''deviant'' wherever it appears.

(f) Sampling plans referred to in this section are those contained in Tables I, II, III, IV, and V and (g)(1) and (g)(2) of this section which follow or any other plans which are applicable. For processed products not included in these tables, the minimum sample size shall be the exact number of sample units prescribed in the table, container group, and lot size that, as determined by the inspector, most closely resembles the product, type, container, size and amount of product to be sampled. The maximum sample size in tables I, II, III, IV, V, (g)(1), (g)(2) and processed

products not included in these tables is 29 sample units.

(g)(1) *Sampling plan for dried figs.* For each 10,000 pounds (or fraction of 10,000 pounds) of product—6 sample units of approximately 35 figs each accumulated into 1 composite (at least 200 figs). Each composite will be examined separately, and all must meet the requirement for the U.S. Grade.

(2) *Sampling plan for dried fruits other than dates and figs.* For each 15,000 pounds (or fraction of 15,000 pounds) of product—sample units of approximately 16 ounces each accumulated into 1 composite (at least 100 ounces) Each composite will be examined separately and all must meet the requirements for the U.S. Grade.

TABLE I—CANNED OR SIMILARLY PROCESSED FRUITS, VEGETABLES, AND PRODUCTS CONTAINING UNITS OF SUCH SIZE AND CHARACTER AS TO BE READILY SEPARABLE

Container size group	Lot size (number of containers) [1]				
Group 1: Any type container of a volume not exceeding that of a No. 303 size can.	3,000 or less	3,001 to 12,000	12,001 to 39,000	39,001 to 84,000	84,001 to 145,000
Group 2: Any type of container of a volume exceeding that of a No. 303 size can but not exceeding that of a No. 3 cylinder size can.	1,500 or less	1,501 to 6,000	6,001 to 19,500	19,501 to 42,000	42,001 to 72,500
Group 3: Any type of container of a volume exceeding that of a No. 3 cylinder size can, but not exceeding that of a No. 12 size can.	750 or less	751 to 3,000	3,001 to 9,750	9,751 to 21,000	21,001 to 36,250
Group 4: Any type of container of a volume exceeding that of a No. 12 size can.	Convert to equivalent number of 6-lb. net weight containers and use group 3				
Lot inspection sample size (no. of sample units) [2]	3	6	13	21	29
Acceptance number	0	1	2	3	4
On-line in-plant inspection sample size (no. of sample units) [2]	3	6	6	13	21
Acceptance number	0	1	1	2	3

[1] Under on-line in-plant inspection, a 5% overrun in number of containers may be permitted by the inspector before going to the next larger sample size.

[2] When a standard sample size is not specified in the U.S. grade standards, the sample units for the various container size groups are as follows: Groups 1, 2, and 3——1 container and its entire contents. Group 4 that approximately 2 pounds of product. When determined by the inspector that a 2-pound sample unit is inadequate, a larger sample unit may be substituted.

TABLE II—FROZEN OR SIMILARLY PROCESSED FRUITS, VEGETABLES, AND PRODUCTS CONTAINING UNITS OF SUCH SIZE AND CHARACTER AS TO BE READILY SEPARABLE

Container size group	Lot size (number of containers) [1]				
Group 1: Any type of container of 1 lb. or less	2,400 or less	2,401 to 9,600	9,601 to 31,200	31,201 to 67,200	67,201 to 116,000
Group 2: Any type of container over 1 lb. but not over 2-½ lbs. net weight.	1,200 or less	1,201 to 4,800	4,801 to 15,600	15,601 to 33,600	33,601 to 58,000
Group 3: Any type of container over 2-½ lbs.	Convert to equivalent number of 2-½ lb. containers and use group 2				
Lot inspection sample size (no. of sample units) [2]	3	6	13	21	29
Acceptance number	0	1	2	3	4
On-line in-plant inspection sample size (no. of sample units) [2]	3	6	6	13	21
Acceptance number	0	1	1	2	3

[1] Under on-line in-plant inspection, a 5% overrun in number of containers may be permitted by the inspector before going to the next larger sample size.

[2] When a standard sample unit size is not specified in the U.S. grade standards, the sample units for the various container size groups are as follows: Groups 1 and 2——1 container and its entire contents. Group 3 containers up to 10 lbs.——approximately 3 pounds of product. When determined by the inspector that a 3-pound sample unit is inadequate, a larger sample unit or 1 or more containers and their entire contents may be substituted for 1 or more sample units of 3 lbs.

TABLE III—CANNED, FROZEN, OR OTHERWISE PROCESSED FRUITS, VEGETABLES, RELATED PRODUCTS OF A COMMINUTED, FLUID OR HOMOGENEOUS STATE

Container size group	Lot size (number of containers) [1]				
Group 1: Any type of container of 1 lb. or less	4,500 or less	4,501 to 18,000	18,001 to 56,000	58,501 to 126,000	126,001 to 217,000
Group 2: Any type of container exceeding 1 lb. but not exceeding 60 ounces..	3,000 or less	3,001 to 12,000	12,001 to 39,000	39,001 to 84,000	84,001 to 145,000
Group 3: Any type of container exceeding 60 ounces but not exceeding 10 lbs..	1,500 or less	1,501 to 6,000	6,001 to 19,500	19,501 to 42,000	42,001 to 72,500
Group 4: Any type of container of a volume exceeding 10 lbs.	Convert to equivalent number of 6-lb. containers and use group 3				
Lot inspection sample size (no. of sample units) [2]	3	6	13	21	29
Acceptance number	0	1	2	3	4
On-line in-plant inspection sample size (no. of sample units) [2]	3	6	6	13	21
Acceptance number	0	1	1	2	3

[1] Under on-line in-plant inspection, a 5% overrun in number of containers may be permitted by the inspector before going to the next larger sample size.

[2] When a standard sample size is not specified in the U.S. grade standards, the sample units for the various container size groups are as follows: Groups 1, 2, and 3——1 container and its entire contents. A smaller sample unit may be substituted in Group 3 at the inspector's discretion. Group 4——approximately 16 ounces of product. When determined by the inspector that a 16 ounce sample unit is inadequate, a larger sample unit may be substituted.

TABLE IV—DEHYDRATED (LOW-MOISTURE) FRUITS, AND VEGETABLES

Container size group	Lot size (number of containers) [1]				
Group 1: Any type of container of 1 lb. or less	1,800 or less	1,801 to 7,200	7,201 to 23,400	23,401 to 50,400	50,401 to 87,000
Group 2: Any type of container over 1 lb. but not over 6 lbs. net weight.	600 or less	601 to 2,400	2,401 to 7,800	7,801 to 16,800	16,801 to 29,000
Group 3: Any type of container over 6 lbs.	Convert to equivalent number of 5 lb. containers and use group 2				
Lot inspection sample size (no. of sample units) [2]	3	6	13	21	29
Acceptance number	0	1	2	3	4
On-line in-plant inspection sample size (no. of sample units) [2]	3	6	6	13	21
Acceptance number	0	1	1	2	3

[1] Under on-line in-plant inspection, a 5% overrun in number of containers may be permitted by the inspector before going to the next larger sample size.

[2] When a standard sample unit size is not specified in the U.S. grade standards, the sample units for the various container size groups are as follows: Group 1——1 container and its entire contents. Groups 2 and 3——1 container and its entire contents or a smaller sample unit when determined by the inspector to be adequate.

TABLE V—DATES

Container size group	Lot size (number of containers) [1]				
Group 1: Any type of container of 1 lb. or less net weight	2,400 or less	2,401 to 9,600	9,601 to 31,200	31,201 to 67,000	67,201 to 116,000
Group 2: Any type of container over 1 lb. but not over 5 lbs. net weight.	800 or less	801 to 3,200	3,201 to 10,400	10,401 to 22,400	22,401 to 33,667
Group 3: Any type of container over 5 lbs.	Convert to equivalent number of 5 lb. containers and use group 2				
Lot inspection sample size (no. of sample units) [2]	3	6	13	21	29
Acceptance number	0	1	2	3	4
On-line in-plant inspection sample size (no. of sample units) [2]	3	6	6	13	21
Acceptance number	0	1	1	2	3

[1] Under on-line in-plant inspection, a 5% overrun in number of containers may be permitted by the inspector before going to the next larger sample size.

[2] Samples consist of 25 ounce sample units, each of which may be a composite of product from a sufficient number of individual containers from 1 case to make up the weight. When previous inspection results from a particular source so indicate, 1 composite sample of 25 ounces of product may be formed from the 3 sample units in the smallest sample size, and 2 composite samples of 25 ounces each may be formed from the 6 sample units in the next to smallest sample size. Sample units in larger sample sizes may not be further composited.

[38 FR 25166, Sept. 12, 1973; 38 FR 26903, Sept. 27, 1973. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981, and amended at 51 FR 20439, June 5, 1986]

§ 52.38a Definitions of terms applicable to statistical sampling.

(a) Terms applicable to both on-line inspection and lot inspection.

(1) *Acceptable Quality Level (AQL).* The maximum percent of defective units of product or the maximum number of defects per hundred units of product which are acceptable as a process average. At the AQL's contained in the statistical sampling plans of this subpart, production has a probability of acceptance (''Pa'') of approximately 95 percent.

(2) *Acceptance sampling.* Sampling inspection in which decisions are made to accept or reject product.

(3) *Attributes.* A method of measurement whereby units of product are examined for the presence or absence of specified characteristics in each unit in the sample.

(4) *Defect.* Any nonconformance of a unit of product from specified requirements of a single quality characteristic. Defects are classed as ''minor,'' ''major,'' ''severe'' or ''critical'' depending upon the severity and undesirabil- ity of the defect.

(5) *Defective.* A unit of product that has one or more defects.

(6) *Inspection by attributes.* Inspection whereby a unit of product is classified as defective or nondefective or the number or defects in the unit of product is counted.

(7) *Standard sample unit size.* A specified amount of product to be used for inspection.

(b) Terms applicable to on-line inspection only.

(1) *Basic inspection period.* A specified period of consecutive production designated for on-line inspection.

(2) *Cumulative Sum Sampling (CuSum) Plan.* An on-line sampling plan that accumulates the number of defects (or defectives), which exceed the sample unit tolerance (''T''), in a series of consecutive samples. Terms specific to the CuSum sampling plan are:

(i) *Acceptance limit (''L'').* The maximum accumulation of defects (or defectives) allowed to exceed the sample unit tolerance (''T'') in any sample unit or consecutive group of sample units.

(ii) *CuSum value.* The accumulated number of defects (or defectives) that exceed the sample unit tolerance (''T'').

(iii) *Sample unit tolerance (''T'').* The allowable number of defects (or defectives) in any sample unit.

(iv) *Starting value (''S'').* The initial CuSum value used to begin a CuSum sampling plan.

(3) *On-line sampling inspection.* The random selection and subsequent inspection of sample units from a production line.

(4) *Probability of acceptance (''Pa'').* The probability that a portion of production, with a given level of quality, will be accepted. In on-line sampling inspection, the probability of acceptance of any portion of production depends on the sample results obtained from the preceding portions. The probability of acceptance values associated with these procedures are the values which would be expected if a large number of sample units are to be inspected. For the CuSum plans referenced in these procedures, the probability of acceptance at the Acceptable Quality Level (AQL) is approximately 95 percent. The starting value (''S'') associated with each CuSum plan helps to make the probability of acceptance of the first portions of production of a basic inspection period as close as possible to 95 percent.

(c) Terms applicable to lot inspection only.

(1) *Acceptance number.* The largest number of defects (or defectives) in the sample that will permit acceptance of the inspection lot.

(2) *Inspection lot.* Any number of containers of the same size and type which contain a processed product of the same type and style, manufactured or

processed under essentially the same conditions, offered for inspection and acceptance at one time.

(3) *Probability of acceptance* (''*Pa*''). The probability that an inspection lot, with a given level of quality, will be accepted.

[43 FR 10540, Mar. 14, 1978. Redesignated at 46 FR 63203, Dec. 31, 1981]

§52.38b Statistical sampling procedures for on-line inspection by attributes of processed fruits and vegetables.

(a) *General.* The Cumulative Sum Sampling Plan, hereinafter referred to as ''CuSum,'' shall be used as the on-line sampling plan for attributes standards under the following conditions.

(1) The producer has designated the intended grade for the basic inspection period prior to the start of production.

(2) Inspection of the product shall be made during the basic inspection period at a point after which all product characteristics, subject to inspection, are fixed and will not be subject to change during final packaging.

(3) A shift to CuSum sampling plans from lot sampling plans during a basic inspection period is not permitted (or vice versa).

(b) *Sampling rate/frequency*. The minimum number of standard sample units to be drawn at random shall be determined by the applicable sampling procedure as approved by the Administrator.

(c) *Determining CuSum values.* At the beginning of the basic inspection period, the CuSum value is set equal to the starting value (''S'') for the specified CuSum plan. The CuSum value is then determined for each consecutive sample unit as follows:

(1) Add the number of defects (or defectives) for the present sample unit to the CuSum value of the previous sample unit.

(2) Subtract the sample unit tolerance (''T'').

(3) The CuSum value is reset in the following situations. However, determine compliance with the designated grade (see paragraph (d) of this section) prior to resetting the CuSum value:

(i) Reset the CuSum value to zero (0) if the CuSum value is less than zero (0).

(ii) Reset the CuSum value to the acceptance limit (''L'') if the CuSum value exceeds the acceptance limit (''L'').

(d) *Determining compliance for a designated grade.* (1) A portion of production meets the designated grade if the CuSum value, calculated from the sample unit representing that portion, is equal to or less than the acceptance limit (''L'') for all classes of defects.

(2) A portion of production fails the designated grade if the CuSum value, calculated from the sample unit representing that portion, exceeds the acceptance limit (''L'') for one or more classes of defects.

(e) *Evaluation of production failing a designated grade.* Production failing a designated grade shall be reevaluated by procedures approved by the USDA.

(f) *Assigning a grade.* (1) All similarly identified (e.g., codes, subcodes, etc.) production will be assigned the same grade.

(2) The grade assigned to similarly identified production will be the lowest grade assigned to any portion of that similarly identified production.

(g) *Redesignation of producer's intended grade.* If the intended grade is redesignated during a basic inspection period, a new CuSum sampling plan shall be instituted for each class of defects (or defectives).

(h) *Cumulative Sum Sampling (CuSum) Plans for processed fruits and vegetables.* (1) Tables VI through X contain the CuSum sampling plans for each of five different standard sample unit sizes. The plans within each table are listed according to increasing values of Acceptable Quality Levels (AQL's).

(2) AQL values of 10.0 or less may be expressed either in ''defects per hundred units'' or in ''percent defective units.'' The same sampling plans are used for both. Separate sampling plans must be used for AQL values greater than 10.0.

(3) These tables also provide the quality levels associated with 50 percent and 10 percent probabilities of acceptance for each of the plans. These quality levels are expressed in the same units as the corresponding AQL values.

(4) A separate CuSum sampling plan is chosen for each class of defects (or

defectives) by first specifying the desired AQL and then selecting the appropriate standard sample unit size. The quality levels associated with 50 percent and 10 percent probabilities of acceptance may be used as guides to help determine a suitable standard sample unit size.

TABLE VI—CUSUM SAMPLING PLANS

[Standard sample unit size=13]

AQL	S	T	L	Quality levels	
				Pa= 50%	Pa= 10%
Quality levels expressed as defects per 100 units or percent defective					
0.65	0.3	0.1	0.9	5.3	17.7
1.0	.2	.2	.8	5.6	17.7
1.5	0	.5	0.5	7.7	19.2
2.2	.5	.5	1.5	8.2	19.2
4.0	.8	.8	2	9.7	19.6
5.0	0	1	1	14.4	30.2
6.5	1	1	2	14.7	30.2
8.5	1	1.5	2.5	17.4	31.3
10.0	1	1.8	2.6	18.8	32.0
Quality levels expressed as defects per 100 units only					
12.5	1	2	3	23.5	41.4
15.0	1	2.5	3	26.1	42.8
20.0	2	3	4	32.2	52.1
25.0	1	4	3	40.3	62.3
33.0	1	5	4	48.9	72.3
40.0	2	6	5	57.1	82.1
50.0	1	8	4	73.3	101.2
65.0	2	10	5	89.9	120.0
85.0	1	13	5	113.9	147.6
100.0	2	15	6	130.4	165.7
150.0	2	22	7	186.5	227.9
250.0	4	35	11	291.2	340.6
Quality levels expressed as percent defective only					
12.5	1	2	2	22.4	36.4
15.0	1	2.5	2.5	25.0	37.4
20.0	1	3	3	30.7	44.5
25.0	1	4	2	38.1	52.8
33.0	1	5	3	46.2	60.3
40.0	1	6	3	53.8	67.4
50.0	2	7	4	61.5	74.1

TABLE VII—CUSUM SAMPLING PLANS

[Standard sample unit size=25]

AQL	S	T	L	Quality levels	
				Pa= 50%	Pa= 10%
Quality levels expressed as defects per 100 units or percent defective					
0.4	0.3	0.1	0.9	2.8	9.2
0.65	.2	.2	.8	3.4	9.2
1.0	0	.5	.5	4.0	10.0
1.5	1	.5	2	4.3	10.0
2.5	0	1	1	7.5	15.7
4.0	.5	1.5	2	9.0	16.3

TABLE VII—CUSUM SAMPLING PLANS—Continued

[Standard sample unit size=25]

AQL	S	T	L	Quality levels	
				Pa= 50%	Pa= 10%
5.0	1.5	1.5	3	9.1	16.3
6.5	1	2	3	12.2	21.5
8.5	0	3	2	16.4	27.1
10.0	1	3	3	16.7	27.1
Quality levels expressed as defects per 100 units only					
12.5	1	4	3	21.0	32.4
15.0	1	5	3	25.2	37.6
20.0	1	6	4	29.7	42.7
25.0	1	8	3	37.7	52.7
33.0	1	10	4	46.5	62.4
40.0	2	12	5	55.1	72.0
50.0	2	14	7	63.9	81.5
65.0	3	18	8	80.7	100.1
85.0	4	23	10	101.8	123.1
100.0	4	27	10	118.3	141.2
Quality levels expressed as percent defective only					
12.5	1	4	3	20.5	29.8
15.0	0	5	2	24.3	34.3
20.0	1	6	3	28.7	38.7
25.0	2	7	4	33.0	43.0
33.0	2	9	5	41.2	51.2
40.0	2	11	5	49.2	59.1
50.0	1	14	3	60.6	70.3

TABLE VIII—CUSUM SAMPLING PLANS

[Standard sample unit size=50]

AQL	S	T	L	Quality levels	
				Pa= 50%	Pa= 10%
Quality levels expressed as defects per 100 units or percent defective					
0.15	0.3	0.1	0.9	1.4	4.6
0.25	.2	.2	.8	1.5	4.6
0.4	0	.5	.5	2.0	5.0
0.65	.5	.5	1.5	2.1	5.0
1.0	.4	.8	1.6	2.5	5.1
1.5	1	1	2	3.8	7.9
2.5	1.5	1.5	3	4.6	8.1
4.0	1	2.5	3	6.8	11.1
5.0	1	3	3	9.3	13.6
6.5	1	4	3	10.5	16.2
8.5	1	5	4	12.7	18.8
10.0	1	6	4	14.9	21.4
Quality levels expressed as defects per 100 units only					
12.5	1	8	3	18.9	26.3
15.0	1	9	4	21.1	28.8
20.0	2	12	5	27.5	36.0
25.0	2	14	7	31.9	40.7
33.0	3	18	9	40.4	50.0
40.0	3	22	9	48.7	59.3
50.0	4	27	10	59.1	70.6
65.0	4	35	11	75.7	88.5
85.0	5	45	14	96.5	110.7

TABLE VIII—CUSUM SAMPLING PLANS—Continued

[Standard sample unit size=50]

AQL	S	T	L	Quality levels	
				Pa=50%	Pa=10%
Quality levels expressed as percent defective only					
12.5	2	7	5	16.8	22.3
15.0	1	9	4	20.9	27.2
20.0	2	11	6	25.2	31.6
25.0	2	14	5	31.2	38.1
33.0	2	18	6	39.4	46.4
40.0	1	22	5	47.3	54.4
50.0	1	27	5	57.2	64.1

TABLE IX—CUSUM SAMPLING PLANS

[Standard sample unit size=100]

AQL	S	T	L	Quality levels	
				Pa=50%	Pa=10%
Quality levels expressed as defects per 100 units or percent defective					
0.1	0.3	0.1	0.9	0.7	2.3
0.15	.2	.2	.8	0.8	2.3
0.25	0	.5	.5	1.0	2.5
0.4	1	.5	2	1.1	2.5
0.65	0	1	1	1.9	3.9
1.0	.5	1.5	2	2.2	4.1
1.5	1	2	2	3.0	5.4
2.5	1	3	3	4.2	6.8
4.0	1	5	3	6.3	9.4
5.0	1	6	4	7.4	10.7
6.5	1	8	4	9.5	13.2
8.5	2	1.0	5	11.7	15.6
10.0	2	1.2	5	13.8	18.0
Quality levels expressed as defects per 100 units only					
12.5	2	14	7	16.0	20.4
15.0	2	17	7	19.1	23.9
20.0	3	22	9	24.4	29.6
25.0	4	27	10	29.6	35.3
33.0	3	36	10	38.8	45.4
40.0	4	43	12	46.1	53.1
50.0	5	53	14	56.4	64.1
Quality levels expressed as percent defective only					
12.5	2	14	6	15.8	19.7
15.0	2	17	6	18.9	23.0
20.0	2	22	7	24.0	28.5
25.0	3	27	8	29.2	33.8
33.0	3	35	9	37.3	42.1
40.0	4	42	10	44.4	49.2
50.0	4	52	10	54.3	59.1

TABLE X—CUSUM SAMPLING PLANS

[Standard sample unit size=200]

AQL	S	T	L	Quality levels	
				Pa=50%	Pa=10%
Quality levels expressed as defects per 100 units or percent defective					
0.04	0.3	0.1	0.9	0.3	1.2
0.065	0.2	0.2	0.8	0.4	1.2
0.1	0	0.5	0.5	0.5	1.3
0.15	0.4	0.8	0.8	0.6	1.3
0.25	0.4	0.8	1.6	0.6	1.3
0.4	1	1	2	1.0	2.0
0.65	1	1.8	2.6	1.2	2.1
1.0	1	2.5	3	1.7	2.8
1.5	1	4	3	2.6	4.1
2.5	1	6	4	3.7	5.3
4.0	1	10	4	5.8	7.8
5.0	2	12	5	6.9	9.0
6.5	2	15	6	8.5	10.8
8.5	3	19	8	10.6	13.1
10.0	3	22	9	12.2	14.8
Quality levels expressed as defects per 100 units only					
12.5	4	27	10	14.8	17.7
15.0	3	33	9	17.8	21.0
20.0	4	43	12	23.1	26.6
25.0	5	53	14	28.2	32.1
33.0	5	70	15	36.9	41.3
40.0	6	84	18	44.1	48.8
50.0	6	105	18	54.8	60.1
Quality levels expressed as percent defective only					
12.5	3	27	9	14.7	17.3
15.0	4	32	10	17.3	20.0
20.0	3	43	9	22.8	25.9
25.0	4	53	11	27.9	31.1
33.0	5	69	13	36.1	39.4
40.0	5	83	14	43.1	46.5
50.0	5	103	14	53.1	56.5

[43 FR 10540, Mar. 14, 1978. Redesignated at 46 FR 63203, Dec. 31, 1981]

§52.38c Statistical sampling procedures for lot inspection of processed fruits and vegetables by attributes.

(a) *General.* Single sampling plans shall be used as the lot sampling plan for attributes standards under either of the following conditions:

(1) Sampling of the product shall be made during the production period. No grade will be assigned to individual sample units. One grade determination only will be made at the end of the production period for the inspection lot.

(2) Sampling of the product shall be made when the inspection lot is located in a warehouse, truck, railroad car, or other similar conveyance.

(b) *Sample size.* Samples shall be randomly selected from each inspection lot in the exact number of sample units indicated for the lot size in tables XI through XIV as applicable for canned, frozen, dried, or dehydrated fruits and vegetables.

TABLE XI—CANNED OR SIMILARLY PROCESSED FRUITS, VEGETABLES, AND PRODUCTS CONTAINING UNITS OF SUCH SIZE AND CHARACTER AS TO BE READILY SEPARABLE

[Lot sample size]

Container size group	Lot size (number of containers)			
Group 1: Any type container of a volume not exceeding that of a No. 303 size can.	12,000 or less	12,001–39,000	39,001–84,000	84,001–145,000
Group 2: Any type of container of a volume exceeding that of a No. 303 size can but not exceeding that of a No. 3 cylinder size can.	6,000 or less	6,001–19,500	19,501–42,000	42,001–72,500
Group 3: Any type of container of a volume exceeding that of a No. 3 cylinder size can, but not exceeding that of a No. 12 size can.	3,000 or less	3,001–9,750	9,751–21,000	21,001–36,250
Group 4: Any type of container of a volume exceeding that of a No. 12 size can.	Convert to equivalent number of 6-lb. net weight containers and use group 3			
Lot inspection: Sample size (number of sample units).	6	13	21	29

TABLE XII—FROZEN OR SIMILARLY PROCESSED FRUITS, VEGETABLES, AND PRODUCTS CONTAINING UNITS OF SUCH SIZE AND CHARACTER AS TO BE READILY SEPARABLE

[Lot sample size]

Container size group	Lot size (number of containers)			
Group 1: Any type of container of 1 lb or less net weight.	9,600 or less ...	9,601–31,200	31,201–67,200	67,201–116,000
Group 2: Any type of container over 1 lb but not over 2½ lb net weight.	4,800 or less ...	4,801–15,600	15,601–33,600	33,601–58,000
Group 3: Any type of container over 2½ lbs.	Convert to equivalent number of 2½-lb. containers and use group 2			
Lot inspection: Sample size (number of sample units).	6	13	21	29

TABLE XIII—CANNED, FROZEN, OR OTHERWISE PROCESSED FRUITS, VEGETABLES, RELATED PRODUCTS OF A COMMINUTED, FLUID OR HOMOGENEOUS STATE

[Lot sample size]

Container size group	Lot size (number of containers)			
Group 1: Any type of container of 1 lb or less.	18,000 or less	18,001–58,500	58,501–126,000	126,001–217,000
Group 2: Any type of container exceeding 1 lb. but not exceeding 60 oz.	12,000 or less	12,001–39,000	39,001–84,000	84,001–145,000
Group 3: Any type of container exceeding 60 oz but not exceeding 10 lb.	6,000 or less ...	6,001–19,500	19,501–42,000	42,001–72,500

TABLE XIII—CANNED, FROZEN, OR OTHERWISE PROCESSED FRUITS, VEGETABLES, RELATED PRODUCTS OF A COMMINUTED, FLUID OR HOMOGENEOUS STATE—Continued

[Lot sample size]

Container size group	Lot size (number of containers)			
Group 4: Any type of container exceeding 10 lbs.	Convert to equivalent number of 6-lb. containers and use group 3.			
Lot inspection: Sample size (number of sample units).	6	13	21	29

TABLE XIV—DEHYDRATED (LOW-MOISTURE) FRUITS, AND VEGETABLES

[Lot sample size]

Container size group	Lot size (number of containers)			
Group 1: Any type of container of 1 lb or less net weight.	7,200 or less	7,201–23,400	23,401–50,400	50,401–87,000
Group 2: Any type of container over 1 lb but not over 6 lb net weight.	2,400 or less	2,401–7,800	7,801–16,800	16,801–29,000
Group 3: Any type of container over 6 lbs.	Convert to equivalent number of 5-lb. containers and use group 2.			
Lot inspection: Sample size (number of sample units).	6	13	21	29

(c) *Determining compliance.* (1) An inspection lot meets the requirements of a quality grade if the number of defects (or defectives) is equal to or less than the acceptance numbers of all classes of defects.

(2) An inspection lot fails the requirements of a quality grade if the number of defects (or defectives) exceeds the acceptance number for one or more classes of defects.

(d) *Lot single sampling plans for processed fruits and vegetables.* (1) Tables XV through XIX contain the lot single sampling plans for each of five different standard sample unit sizes. The plans within each table are listed according to increasing values of Acceptable Quality Levels (AQL's).

(2) AQL values of 10.0 or less may be expressed either in ''defects per hundred units'' or in ''percent defective units.'' The same sampling plans are used for both. Separate sampling plans must be used for AQL values greater than 10.0.

(3) A separate lot single sampling plan is chosen for each class of defects (or defectives) by first specifying the desired AQL, the appropriate standard sample unit size, and the number of sample units as specified in § 52.38c (b) of this subpart. The quality levels associated with the Pa=50% and Pa=10% levels are given in the instructional manual.

TABLE XV—LOT SINGLE SAMPLING PLANS

[Standard sample unit size=6]

	Number of sample units			
	6	13	21	29
Acceptance numbers—quality levels expressed as defects per 100 units or percent defective—AQL				
1.0	1	2	3	4
1.5	1	3	4	5
2.5	3	4	6	8
4.0	4	6	9	11
5.0	4	7	11	14
6.5	5	9	13	17
8.5	6	11	16	21
10.0	7	12	19	24
Quality levels expressed as defects per 100 units only				
12.5	8	15	22	29
15.0	9	17	26	35
20.0	12	22	33	44
25.0	14	27	41	54
33.0	18	34	52	70
40.0	21	40	62	83
50.0	25	49	76	102
65.0	31	62	97	131
85.0	40	80	124	168
100.0	46	92	144	196

TABLE XV—LOT SINGLE SAMPLING PLANS—Continued

[Standard sample unit size=6]

	Number of sample units			
	6	13	21	29
150.0	66	135	212	288
250.0	105	218	344	469
Quality levels expressed as percent defective only				
12.5	8	15	22	29
15.0	9	17	25	34
20.0	11	21	33	43
25.0	13	26	39	53
33.0	16	32	50	67
40.0	19	38	59	80
50.0	23	46	72	98

TABLE XVI—LOT SINGLE SAMPLING PLANS

[Standard sample unit size=13]

	Number of sample units			
	6	13	21	29
Acceptance numbers—quality levels expressed as defects per 100 units or percent defective—AQL				
0.65	1	3	4	5
1.0	2	4	6	7
1.5	3	5	8	10
2.5	4	8	11	15
4.0	6	11	16	22
5.0	7	13	20	26
6.5	9	17	25	33
8.5	11	21	31	41
10.0	12	24	36	48
Quality levels expressed as defects per 100 units only				
12.5	15	29	44	58
15.0	17	34	51	69
20.0	22	43	67	90
25.0	27	53	82	110
33.0	34	68	106	143
40.0	40	81	126	171
50.0	49	99	156	211
65.0	62	127	199	271
85.0	80	163	257	350
100.0	92	190	300	409
Quality levels expressed as percent defective only				
12.5	15	28	43	58
15.0	17	33	51	68
20.0	21	42	65	88
25.0	26	51	80	108
33.0	32	66	103	139
40.0	38	78	123	166
50.0	46	95	150	204

TABLE XVII—LOT SINGLE SAMPLING PLANS

[Standard sample unit size=25]

	Number of sample units			
	6	13	21	29
Acceptance numbers—quality levels expressed as defects per 100 units or percent defective—AQL				
0.4	2	3	5	6
0.65	3	5	7	8
1.0	4	6	9	12
1.5	5	9	13	16
2.5	7	13	19	25
4.0	10	19	29	38
5.0	12	23	35	46
6.5	15	29	44	58
8.5	19	36	56	74
10.0	21	42	64	86
Quality levels expressed as defects per 100 units only				
12.5	26	51	79	106
15.0	30	60	93	126
20.0	39	78	122	165
25.0	48	96	150	203
33.0	61	124	195	265
40.0	73	149	234	318
50.0	89	183	289	394
65.0	114	235	372	507
Quality levels expressed as percent defective only				
12.5	25	50	78	105
15.0	30	59	92	125
20.0	38	77	120	163
25.0	46	94	148	200
33.0	59	121	191	260
40.0	70	145	228	312
50.0	85	177	281	385

TABLE XVIII—LOT SINGLE SAMPLING PLANS

[Standard sample unit size=50]

	Number of sample units			
	6	13	21	29
Acceptance numbers—quality levels expressed as defects per 100 units or percent defective—AQL				
0.15	1	3	4	5
0.25	2	4	5	7
0.4	3	5	8	10
0.65	4	8	11	15
1.0	6	11	16	21
1.5	8	15	22	29
2.5	12	23	35	46
4.0	18	34	53	70
5.0	21	42	64	86
6.5	27	53	82	110
8.5	34	67	105	142
10.0	39	78	122	165
Quality levels expressed as defects per 100 units only				
12.5	48	96	150	203
15.0	56	114	178	242
20.0	73	149	234	318
25.0	89	183	289	394
33.0	115	239	377	514
40.0	138	287	454	620

TABLE XVIII—LOT SINGLE SAMPLING PLANS—Continued

[Standard sample unit size=50]

	Number of sample units			
	6	13	21	29
50.0	170	355	563	769
Quality levels expressed as percent defective only				
12.5	47	95	149	202
15.0	55	112	177	240
20.0	71	147	231	315
25.0	87	181	286	390
33.0	112	234	372	508
40.0	134	281	446	611
50.0	164	346	552	756

TABLE XIX—LOT SINGLE SAMPLING PLANS

[Standard sample unit size=100]

	Number of sample units			
	6	13	21	29
Acceptance numbers—quality levels expressed as defects per 100 units or percent defective—AQL				
0.1	2	3	5	6
0.15	3	4	6	8
0.25	4	6	9	12
0.4	5	9	13	17
0.65	7	13	20	26
1.0	10	19	29	38
1.5	14	27	41	54
2.5	21	42	64	86
4.0	32	64	99	134
5.0	39	78	122	165
6.5	49	99	156	211
8.5	63	128	200	272
10.0	73	149	234	318
12.5	89	183	289	394
15.0	105	218	344	469
20.0	138	287	454	620
25.0	170	355	563	769
33.0	221	463	736	1,008
40.0	266	558	888	1,216
50.0	329	692	1,103	1,513
Quality levels expressed as percent defective only				
12.5	88	182	287	392
15.0	104	216	342	467
20.0	136	284	450	615
25.0	167	351	558	763
33.0	217	457	728	999
40.0	260	549	877	1,203
50.0	320	680	1,088	1,494

[43 FR 10542, Mar. 14, 1978. Redesignated at 46 FR 63203, Dec. 31, 1981]

§52.39 Issuance of certificate of sampling.

Each inspector and each licensed sampler shall prepare and sign a certificate of sampling to cover the samples drawn by the respective person, except that in-plant inspectors who inspect the samples which they have drawn need not prepare a certificate of sampling. One copy of each certificate of sampling prepared shall be retained by the licensed sampler and the original and all other copies thereof shall be disposed of in accordance with the instructions of the Administrator.

[51 FR 20445, June 5, 1986]

§52.40 Identification of lots sampled.

Each lot from which officially drawn samples are selected shall be marked in such manner as may be prescribed by the Administrator, if such lots do not otherwise possess suitable identification.

FEES AND CHARGES

§52.41 Payment of fees and charges.

Fees and charges for any inspection service shall be paid by the interested party making the application for such service, in accordance with the applicable provisions of the regulations in this part, and if so required by the inspection service, an advance of funds prior to rendering inspection service in an amount suitable to the Administrator, or a surety bond suitable to the Administrator, shall be required as a guarantee of payment for the services rendered. All fees and charges for any inspection service performed pursuant to the regulations in this part shall be paid by check, draft, or money order payable to the United States Department of Agriculture. Remittance shall be sent to the address specified on the bill for collection on or before the due date to avoid a late payment charge.

[51 FR 20445, June 5, 1986]

§52.42 Schedule of fees.

Unless otherwise provided in a written agreement between the applicant and the Administrator, the fee for any inspection service performed under the regulations in this part, shall be at the rate of $41.00 per hour plus one-half the hourly rate per hour for all scheduled overtime hours. When work is performed on a holiday, an additional hour shall be charged at the regular hourly rate for each hour worked. A ten (10) percent night differential

charge will be made for all work performed between the hours of 6 p.m. and 6 a.m.

[59 FR 41378, Aug. 12, 1994, as amended at 61 FR 25549, May 22, 1996]

§ 52.43 Fees to be charged and collected for sampling when performed by a licensed sampler.

Such sampling fees as are specifically prescribed by the Administrator in connection with licensing of the particular sampler will be assessed and collected from the applicant by the office of inspection serving the area where services are performed: *Provided*, That if the employee is an employee of a state, the appropriate authority of the state may make the collection.

[48 FR 12326, Mar. 24, 1983]

§ 52.44 Inspection fees when charges for sampling have been collected.

For any lot of processed products from which a sample in drawn by a licensed sampler and the applicable sampling fee is collected, as provided in § 52.43, the fees for the other inspection services with respect to such lot shall not include charges for sampling.

[48 FR 12326, Mar. 24, 1983]

§ 52.45 Inspection fees when charges for sampling have not been collected.

For any lot of processed products from which a sample is drawn by a licensed sampler and the sampling fee is not collected by the appropriate authority as provided in § 52.43, the fees and charges for inspection services with respect to such lot shall be the applicable fees and charges prescribed in § 52.42.

[48 FR 12326, Mar. 24, 1983]

§ 52.46 Fee for appeal inspection.

The fee to be charged for an appeal inspection shall be at the rates prescribed in this part for other inspection services: *Provided*, That, if the result of any appeal inspection made for any applicant other than the United States or any agency or instrumentality thereof, discloses that a material error was made in the inspection on which the appeal is made, no inspection fee shall be assessed.

§ 52.47 Changing types of service.

If an applicant cancels a new year-round contract before a full year has elapsed, the applicant shall be charged the difference between the year-round rate and less than year-round rate for the full period the year-round contract was in effect. If an applicant cancels a year-round contract after a full year or more of uninterrupted service, the fee remains at the year-round rate.

[59 FR 41378, Aug. 12, 1994]

§ 52.48 Charges for plant survey and inspection.

(a) The fees to be charged for a plant survey and inspection shall be at the rates prescribed in §§ 52.42 and 52.51.

(b) Fees charged for a plant survey and a sanitation inspection under § 52.42 of this part will be credited back to plants entering into an in-plant inspection contract with AMS within 60 days of the survey.

[38 FR 25168, Sept. 12, 1973. Redesignated at 42 FR 32514, June, 27, 1977 and at 46 FR 63203, Dec. 31, 1981; 51 FR 20445, June 5, 1986]

§ 52.49 Charges for copies of inspection documents and/or inspection data.

If the applicant for inspection service requests additional copies of inspection documents and/or inspection data referable to the processed product covered thereby, the applicant may obtain such copies from the supervisor in the office of inspection serving the area where the service was performed at a charge of ½ hour per copy in accordance with the rate in § 52.42: Provided, that no charge shall be made for one copy if requested at the time of the original request for inspection. Inspection certificates issued in accordance with § 52.21 may be supplied to any financially interested party at a charge of ½ hour per certificate for each seven (7), or fewer copies in accordance with the rate in § 52.42.

[54 FR 50732, Dec. 11, 1989]

§ 52.50 Travel and other expenses.

Charges may be made to cover the cost of travel time incurred in connection with the performance of any inspection service, including appeal inspections, at the rate of $41.00 per hour.

This includes time spent waiting for transportation as well as time spent traveling, but not to exceed eight hours of travel time for any one person for any one day: And provided further, that if travel is by common carrier, no hourly charge may be made for travel time outside the employee's official work hours.

[56 FR 27898, June 18, 1991, as amended at 58 FR 11186, Feb. 24, 1993; 59 FR 41378, Aug. 12, 1994; 61 FR 25550, May 22, 1996]

§52.51 Charges for inspection services on a contract basis.

(a) Irrespective of fees and charges prescribed in foregoing sections, or in this section, the Administrator may enter into contracts with applicants to perform continuous inspection services or other types of inspection services pursuant to the regulations in this part and other requirements as prescribed by the Administrator in such contract, and the charges for such inspection service provided in such contracts shall be on such basis as will reimburse the Agricultural Marketing Service of the Department for the full cost of rendering such inspection service including an appropriate overhead charge to cover as nearly as practicable administrative overhead expenses as may be determined by the Administrator.

(b) Irrespective of fees and charges prescribed in the foregoing sections, or in this section, the Administrator may enter into a written memorandum of understanding or contract, whichever may be appropriate, with any administrative agency charged with the administration of a marketing agreement or a marketing order effective pursuant to the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601 et seq.) for the making of inspections pursuant to said agreement or order on such basis as will reimburse the Agricultural Marketing Service of the Department for the full cost of rendering such inspection service including an appropriate overhead charge to cover as nearly as practicable administrative overhead expenses as may be determined by the Administrator. Likewise, the Administrator may enter into a written memorandum of understanding or contract, whichever may be appropriate, with an administrative agency charged with an administration of a similar program operated pursuant to the laws of any State.

(c) Charges for year-round in-plant inspection services on a contract basis will be billed to the applicant monthly for all hours worked with a minimum of 40 hours per week for each inspector assigned to perform the inspection services in accordance with the following schedule:

(1) For personnel assigned on a year-round basis: Each inspector—$34.00 per hour.

(2) For personnel assigned on less than a year-round basis: Each inspector—$42.00 per hour. In-plant sampler—$22.00 per hour.

(3) Holiday pay. An eight (8) hour charge will be made for each inspector assigned at their regular hourly rate. When work is performed, an additional hour at the regular hourly rate will be charged for each hour worked.

(4) Night differential. A 10 percent night differential charge will be made for all work performed between the hours of 6 p.m. and 6 a.m.

(5) *Overtime.* All overtime hours will be charged at the regular rates specified in paragraphs (c)(1) and (2) of this section, plus one-half the hourly rate, per hour.

(d) Charges for less than year-round in-plant inspection services (four or more consecutive 40 hour weeks) on a contract basis will be billed to the applicant monthly for all hours with a minimum of 40 hours for each inspector assigned to perform the inspection services in accordance with the following schedule: [1]

(1) Each inspector—$42.00 per hour.[1]

(2) In-plant sampler—$22.00 per hour.

(3) Holiday pay. An eight (8) hour charge will be made for each inspector assigned at their regular hourly rate. When work is performed, an additional hour at the regular hourly rate will be charged for each hour worked.

(4) Night differential. A 10 percent night differential will be charged for all work performed between the hours of 6 p.m. and 6 a.m.

[1] Except a minimum of 8 hours per day will be billed in lieu of a minimum of 40 hours a week.

(5) *Overtime.* All overtime hours will be charged at the regular rates specified in paragraphs (d)(1) and (2) of this section, plus one-half the hourly rate, per hour.

(e) No Member of, or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of any contract provided for in this section or to any benefit that may arise therefrom, but this provision shall not be construed to extend to such contract if made with a corporation for its general benefit, and shall not extend to any benefits that may accrue from the contract to a Member of, or Delegate to Congress, or a Resident Commissioner in his capacity as a farmer.

[38 FR 25168, Sept 12, 1973, as amended at 40 FR 47753, October 10, 1975. Redesignated at 42 FR 32514, June 27, 1977 and amended at 42 FR 45327, Sept. 9, 1977; 43 FR 46291, Oct. 6, 1978. Redesignated at 46 FR 63203, Dec. 31, 1981 and amended at 47 FR 20108, May 11, 1982; 51 FR 20445, June 5, 1986. Redesignated and amended at 54 FR 50732, Dec. 11, 1989; 56 FR 27899, June 18, 1991; 59 FR 41378, Aug. 12, 1994; 61 FR 25550, May 22, 1996]

MISCELLANEOUS

§ 52.53 Approved identification.

(a) *General.* Use of the approved identification marks described and illustrated in Figures 1 through 10 of this section is restricted to processed products that:

(1) Are clean, safe, and wholesome;

(2) Have been produced or packed in an approved plant.

(3) Are truthfully and accurately labeled.

(4) When graded against a U.S. grade standard, meet the quality requirements for U.S Grade C or better;

(5) Meet applicable fill weight and/or drained weight, Brix or other characteristics of a commodity related to market value;

(6) Have been certified, or have been inspected and are eligible for certification, by an inspector; and, in addition, meet the specific requirements stated in (b), (c), and (d) of this section.

(7) Labels and advertising material containing or referring to approved identification must be approved by USDA inspection service prior to use.

(b) *Inspection* (*Continuous*) *grade and inspection marks.* The official marks approved for use by plants operating under USDA continuous inspection service contracts shall be similar in form and design to the examples in Figures 1 through 10 of this section: *Provided,* That the official marks illustrated by figures 8 and 9 are limited to products packed by plants operating under an approved Quality Assurance type of inspection contract: *And provided further,* That the inspection marks illustrated in figures 1 through 4 may only be used on products packed by plants operating under USDA continuous inspection.

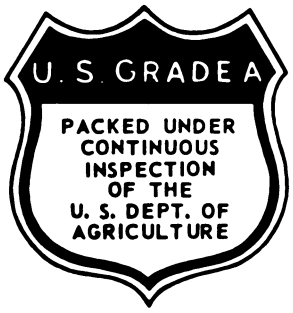


FIGURE 1.

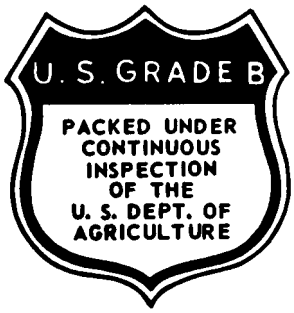


FIGURE 2.

Statement enclosed within a shield.

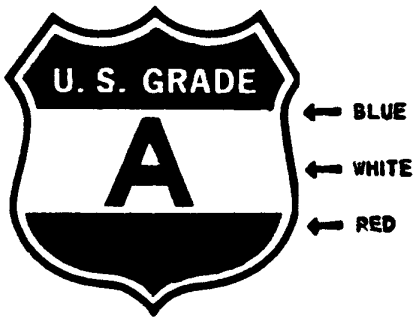
FIGURE 3.

PACKED UNDER
CONTINUOUS
INSPECTION
OF THE
U. S. DEPT. OF
AGRICULTURE

Statement without the use of the shield.

FIGURE 4.

(c) *In-plant inspection (other than continuous) grade and inspection marks.* The official marks approved for use by plants operating under USDA inspection service contracts (other than continuous) requiring a resident inspector shall be limited to those similar in form and design to the examples in Figures 5 through 14 of this section; Provided: That the official marks illustrated by Figures 9 and 10 are limited to products packed by plants operating under an approved Quality Assurance type of an inspection contract.



Shield using red, white, and blue background or other colors appropriate for Label.

FIGURE 5

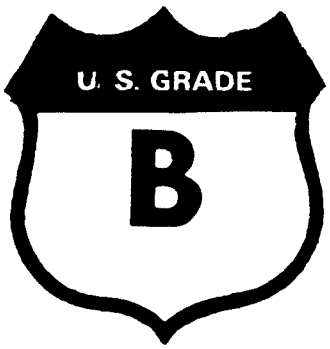


FIGURE 6

PACKED UNDER
INSPECTION
OF THE
U. S. DEPT. OF
AGRICULTURE

Statement without
the use of the shield.

FIGURE 7

Statement enclosed
within a shield.

FIGURE 8

FIGURE 9

PACKED UNDER
QUALITY ASSURANCE
PROGRAM
of the
U.S. DEPT. OF AGRICULTURE

Statement without the use of the shield.

FIGURE 10

(d) *''Approved plant-lot inspection'' grade and inspection marks.* Processed products that are produced in an approved plant as defined in § 52.2 and inspected and certified by an inspector on a lot basis may be labeled with an official mark as defined in § 52.3 when adequate control and use is approved. The use of official marks for this type of service is restricted to grade marks (with or without plain shield) and/or the statement ''Inspected by the U.S. Department of Agriculture'' (with or without plain shield). The official marks shall be similar in form and design as illustrated in figures 11 through

14. Failure to have all lots bearing official marks either inspected and certified or certified as produced in an approved plant shall cause the debarment of the user from receiving subsequent services, and such other actions as provided for in the Agricultural Marketing Act of 1946.

Shield with plain background

Figure 11

(1) U. S. GRADE A

(2) U. S. GRADE B

(3) U. S. GRADE C

Figure 12

Statement enclosed within a shield.

Figure 13

INSPECTED

BY THE

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AGRICULTURE

Statement without the use of the shield.

Figure 14

(e) *Sampling marks.* Processed products which have been sampled for inspection as provided in this part may, at the option of the Department, be identified by an authorized representative of the Department. The products are identified by stamping the container(s) comprising such lot(s), with an official ''sampling mark'', similar in form and design to the example in figure 15 of this section. The ''sampling marks'' will identify products officially sampled by a particular field office.

Such mark will include a code identifying the field office performing the sampling.

FIGURE 15

(f) *Removal of labels bearing approved grade or inspection marks.* (1) At the time a lot of processed products bearing approved grade or inspection marks is found to be mislabeled, the processor shall separate and retain such lot for relabeling. Removal and replacement of labels shall be done, under the supervision of a USDA inspector, within the time specified by the Administrator or as may be mutually agreed by the processor and the Administrator.

(2) The processor shall be held accountable to the Department for all mislabeled products until the products have been properly labeled.

(3) Clearance for the release of the relabeled product shall be obtained, by the processor, from the inspector.

(g) *Licensing and identification of certain official devices.* The Administrator may issue licenses permitting the manufacture, identification, and sale of any official device designated as a USDA color standard, defect guide or other similar aid under such terms and conditions as may be specified by the Administrator. Licenses shall be available to all persons meeting conditions prescribed by the Administrator, shall be nonexclusive, and shall be recoverable for cause. No person shall manufacture, identify, distribute or sell any such official device except at the direction of or under license from the Administrator. Such official devices may be marked, tagged or otherwise designated with the prefix ''USDA'' together with other identifying words or symbols, as prescribed by the license.

(h) *Prohibited uses of approved identification.* Except as specified in this section, no label or advertising material used upon, or in conjunction, with a processed product, as defined by these Regulations, shall bear a brand name, trademark, product name, company name, or any other descriptive material that incorporates, resembles, simulates, or alludes to, any official U.S. Department of Agriculture certificate of quality or loading, grade mark, grade statement (except honey and maple syrup which may bear such grade mark or statement), continuous inspection mark, continuous inspection statement, sampling mark or sampling statement, or combinations of one or more thereof.

(i) *Disposition of labels bearing approved grade or inspection marks when a contract is cancelled.* Upon cancellation of a contract, labels bearing approved grade or inspection marks shall remain under the control of the inspection service. The inspection service will approve disposition of said labels for destruction, sale or transfer to another approved plant, remove or obliterate the grade or inspection mark, or other action as may be agreed upon by all interested parties.

[38 FR 25169, Sept. 12, 1973, as amended at 40 FR 48934, Oct. 20, 1975. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981; 48 FR 12326, Mar. 24, 1983; 51 FR 20446, June 5, 1986; 60 FR 3533, Jan. 18, 1995]

§ 52.54 Debarment of service.

(a) The following acts or practices, or the causing thereof, may be deemed sufficient cause for the debarment, by the Administrator, of any person, including any agents, officers, subsidiaries, or affiliates of such person, from any or all benefits of the Act for a specified period. The Rules of Practice Governing Formal Adjudicatory Proceedings Instituted by the Secretary Under Various Statutes set forth in §§ 1.130 through 1.151 of this title and the Supplemental Rules of Practice in

part 50 of this chapter shall be applicable to such debarment action.

(1) *Fraud or misrepresentation.* Any misrepresentation or deceptive or fraudulent practice or act found to be made or committed in connection with:

(i) The making or filing of an application for any inspection service;

(ii) The submission of samples for inspection;

(iii) The use of any inspection report or any inspection certificate, or appeal inspection certificate issued under the regulations in this part;

(iv) The use of the words ''Packed under continuous inspection of the U.S. Department of Agriculture,'' any legend signifying that the product has been officially inspected, any statement of grade or words of similar import in the labeling or advertising of any processed product;

(v) The use of a facsimile form which simulates in whole or in part any official U.S. certificate for the purpose of purporting to evidence the U.S. grade of any processed product.

(2) *Wilful violation of the regulations in this subpart.* Wilful violation of the provisions of this part of the Act.

(3) *Interfering with an inspector, inspector's aid, or licensed sampler.* Any interference with, obstruction of, or attempted interference with, or attempted obstruction of any inspector, inspector's aide, or licensed sampler in the performance of his duties by intimidation, threat, assault, bribery, or any other means—real or imagined.

[38 FR 25170, Sept. 12, 1973. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981; 60 FR 8464, Feb. 14, 1995]

§52.55 Political activity.

All inspectors and licensed samplers are forbidden, during the period of their respective appointments or licenses, to take an active part in political management or in political campaigns. Political activities in city, county, State, or national elections, whether primary or regular, or in behalf of any party or candidate, or any measure to be voted upon, are prohibited. This applies to all appointees or licensees, including, but not limited to, temporary and cooperative employees and employees on leave of absence with or without pay. Wilful violation of this section will constitute grounds for dismissal in the case of appointees and revocation of licenses in the case of licensees.

§52.56 Purchase of commodity samples for review.

Employees are authorized to purchase commodity samples for review. Employees must pay and obtain receipts for such purchases and keep receipts subject to inspection by supervisory or other authorized Department employees.

[48 FR 12330, Mar. 24, 1983]

§52.57 Compliance with other laws.

None of the requirements in the regulations in this part shall excuse failure to comply with any Federal, State, county, or municipal laws applicable to the operation of food processing establishments and to processed food products.

§52.58 Identification.

Each inspector and licensed sampler shall have in his possession at all times and present upon request, while on duty, the means of identification furnished by the Department to such person.

§52.59 OMB control numbers assigned pursuant to the Paperwork Reduction Act.

The information collection requirements contained in this part have been approved by the Office of Management and Budget (OMB) under the provisions of 44 U.S.C. Chapter 35 and have been assigned OMB control no. 0581–0123.

(44 U.S.C. Ch. 35)

[49 FR 23826, June 8, 1984]

REQUIREMENTS FOR PLANTS TO BE APPROVED AND FOR PLANTS USING CONTRACT IN-PLANT INSPECTION SERVICES[1]

SOURCE: Sections 52.81 to 52.83 appear at 38 FR 25170, Sept. 12, 1973, unless otherwise

[1] Compliance with the above requirements does not excuse failure to comply with all applicable sanitary rules and regulations of city, county, State, Federal, or other agencies having jurisdiction over such plants and operations.

noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

§ 52.81 Plant survey.

Prior to a plant being approved, or the inauguration of in-plant inspection services, and at such intervals as may be deemed necessary or appropriate, the Administrator will make, or cause to be made, a survey and inspection of the plant where such inspection services are to be performed to determine whether the plant and methods of operation are suitable and adequate for the performance of such service in accordance with:

(a) The regulations in this part, including, but not limited to, the requirements contained in §§ 52.81 through 52.83; and

(b) The terms and provisions of any contract pursuant to which the service is to be performed: *Provided,* That, such survey(s) shall be repeated at least yearly.

§ 52.82 Basis of survey and plant inspection.

The plant survey and inspection will be based on the Regulations issued under the Federal Food, Drug, and Cosmetic Act—Human Foods; Good Manufacturing Practice (Sanitation) in Manufacture, Processing, Packing, or Holding (21 CFR Part 110)—as may be modified or augmented by the Federal Food and Drug Administration, U.S. Department of Health, Education, and Welfare or the Administrator of the Agricultural Marketing Service.

§ 52.83 Reporting results of the plant survey and inauguration of inspection services.

(a) Results of the plant survey shall be reported in writing to a designated plant official.

(b) When the plant meets the requirements for the survey, inspection services may be inaugurated at a time mutually satisfactory to the plant management and USDA.

(c) When the plant fails the requirements of the survey, contract services shall be withheld until corrective action is completed to the satisfaction of the USDA.

Subpart—United States Standards for Grades of Frozen Cauliflower

SOURCE: 61 FR 43941, Aug. 27, 1996, unless otherwise noted.

§ 52.721 Product description.

Frozen cauliflower is prepared from fresh flower heads of the cauliflower plant (Brassica oleracea botrytis) by trimming, washing, and blanching and is frozen and maintained at temperatures necessary for preservation of the product.

§ 52.722 Styles.

(a) *Clusters* mean individual segments of trimmed and cored cauliflower heads, which measure not less than 20 mm (0.75 in) in the greatest dimension across the top of the unit.

(b) *Nuggets or Small Clusters* mean individual segments of trimmed and cored cauliflower heads, which measure from 6 mm (0.25 in) to less than 20 mm (0.75 in) in the greatest dimension across the top of the unit.

§ 52.723 Requirements for style.

(a) *Clusters style.* A maximum of 10%, by weight, of clusters less than 20 mm (0.75 in) in the greatest dimension across the top of the unit are allowed.

(b) *Nuggets style.* A maximum of 20%, by weight, of clusters, 20 mm (0.75 in) or greater, and a maximum of 10%, by weight, of clusters less than 6 mm (0.25 in) in the greatest dimension across the top of the unit are allowed.

§ 52.724 Definitions of terms.

(a) *Acceptable quality level* (AQL) means the maximum percent of defective units or the maximum number of defects per hundred units of product that, for the purpose of acceptance sampling, can be considered satisfactory as a process average.

(b) *Appearance. Good appearance* means that the overall appearance or edibility of the cauliflower is not materially affected and; for clusters style, a maximum of 5%, by weight, of chaff is allowed for the sample unit. For nuggets style, a maximum of 10%, by weight, of chaff is allowed for the sample unit.

(c) *Blemished* means the cluster is affected or damaged by pathological injury, insect injury, or any other injury, which singly or in combination, affects the appearance or eating quality of the unit.

(1) *Minor blemished* means a unit with a dark blemish(s), which in the aggregate, exceeds the area of a circle 4 mm (0.16 in) in diameter but not 6 mm (0.25 in) or a light blemish(s), which in the aggregate, exceeds the area of a circle 6 mm (0.25 in) in diameter.

(2) *Major blemished* means a unit with a dark blemish(s), which in the aggregate, exceeds the area of a circle 6 mm (0.25 in) in diameter.

(d) *Chaff* mean individual segments of trimmed and cored cauliflower material, with and without head material, which measure less than 6 mm (0.25 in) in its greatest dimension.

(e) *Character* means the extent of firmness and compactness of the cluster and its degree of freedom from fuzzy, ricey and soft units.

(1) *Fuzzy character* means a cluster with sections of head that have elongated individual flowers (or pedicels) that result in a very fuzzy appearance.

(2) *Ricey character* means a cluster with sections of head on which the ultimate branches have become elongated, causing the flower clusters to separate and present a loose or open and sometimes granular appearance.

(3) *Soft character* means a cluster that is limp and flabby and the flesh yields readily when handled.

(f) *Color defect*.

(1) *Minor* means that after cooking, the cluster possesses a color that is more than slightly darker than light cream to dark cream.

(2) *Major* means that after cooking, the cluster possesses a color that is seriously darkened or discolored.

(g) *Core material* means the loose or attached center portion of the cauliflower head which is tough or fibrous.

(h) *Defect* means any nonconformance of a unit(s) of product from a specified requirement of a single quality characteristic.

(i) *Fragment* means a stem or other cauliflower material without head material that is 6 mm (0.25 in) or greater in the greatest dimension (excluding tough or fibrous core material, loose leaves, and chaff).

(j) *Loose leaves* mean leaf material, exclusive of small tender leaves, that are detached from the stem.

(k) *Mechanical damage* means that the appearance of the unit is affected by trimming, or the unit is crushed or broken to the extent that the appearance is materially affected.

(l) *Normal flavor and odor* means that the cauliflower, before and after cooking, has a flavor and odor that is normal and is free from objectionable flavors and odors.

(m) *Sample unit* means the amount of product specified to be used for grading. For varietal characteristics, flavor and odor and appearance, a sample unit is the entire container. For blemishes, character, color, core material, fragments, mechanical damage and loose leaves, a sample unit is 100 grams for Nuggets Style and 50 units for Clusters Style. It may be:

(1) The entire contents of a container;

(2) A portion of the contents of a container; or

(3) A combination of the contents of two or more containers.

(n) *Tolerance* (TOL.) means the percentage of defective units allowed for each quality factor for a specific sample size.

(o) *Unit* means one cluster or piece of cauliflower.

§52.725 Grades.

(a) *U.S. Grade A* is the quality of frozen cauliflower that meets the following prerequisites in which the cauliflower:

(1) Has similar varietal characteristics,

(2) Has a normal flavor and odor;

(3) Has a good appearance; and

(4) Is within the limits for defects as specified in Tables I and II, of this subpart, as applicable for the style in §52.727.

(b) *U.S. Grade B* is the quality of frozen cauliflower that meets the following prerequisites in which the cauliflower:

(1) Has similar varietal characteristics;

(2) Has a normal flavor and odor;

(3) Has a good appearance; and

(4) Is within the limits for defects as specified in Tables I and II, of this subpart as applicable for the style in § 52.727.

(c) *Substandard* is the quality of frozen cauliflower that fails to meet the requirements of U.S. Grade B.

§ 52.726 Factors of quality.

The grade of frozen cauliflower is based on meeting the requirements for the following factors:

(a) Prerequisites;

(1) Varietal characteristics;

(2) Flavor and odor; and

(3) Appearance.

(b) Classified Quality Factors;

(1) Major blemished;

(2) Total blemished (Major and Minor);

(3) Fuzzy character;

(4) Ricey character;

(5) Soft character;

(6) Major color defects;

(7) Total color defects (Major and Minor);

(8) Core material;

(9) Fragments;

(10) Loose leaves; and

(11) Mechanical damage.

§ 52.727 Requirements for classified quality factors.

TABLE I.—AQL'S AND TOLERANCES (TOL.) FOR DEFECTS IN CLUSTERS STYLE BASED ON 50 UNITS OF PRODUCT FOR 13 SAMPLE UNITS, 50×13=650 UNITS

Sample Units × Sample Unit Size	1×50	3×50	6×50	13×50	21×50	29×50		
Units of Product	50	150	300	650	1050	1450		
Defects	AQL	TOL						
	Grade A		Acceptance numbers					
Major Blemished	3.8	5.0	4	9	17	33	50	67
Total Blemished (Major & Minor)	8.2	10.0	7	18	33	65	101	137
Fuzzy Characteer	1.3	2.0	2	4	7	13	20	26
Ricey Character	8.2	10.0	7	18	33	65	101	137
Soft Character	0.612	1.0	1	2	4	7	10	14
Major Color Defect	0.612	1.0	1	2	4	7	10	14
Total Color Defect (Major & Minor)	6.4	8.0	6	15	26	52	80	108
Core Material	2.17	3.0	3	6	11	20	31	41
Fragments	3.8	5.0	4	9	17	33	50	67
Mechanical Damage	8.2	10.0	7	18	33	65	101	137
Loose Leaves (each piece)	2.17	3.0	3	6	11	20	31	41
	Grade B		Acceptance numbers					
Major Blemished	8.2	10.0	7	18	33	65	101	137
Total Blemished (Major & Minor)	13.0	15.0	10	26	48	98	154	209
Fuzzy Character	6.4	8.0	6	15	26	52	80	108
Ricey Character	13.0	15.0	10	26	48	98	154	209
Soft Character	2.9	4.0	3	8	13	26	39	53
Major Color Defect	3.8	5.0	4	9	17	33	50	67
Total Color Defect (Major & Minor)	13.8	16.0	11	27	51	104	163	221
Core Material	3.8	5.0	4	9	17	33	50	67
Fragments	8.2	10.0	7	18	33	65	101	137
Mechanical Damage	17.6	20.0	13	34	63	130	205	279
Loose Leaves (each piece)	6.4	8.0	6	15	26	52	80	108

TABLE II.—AQL'S AND TOLERANCES (TOL.) FOR DEFECTS IN NUGGETS OR SMALL CLUSTERS STYLE BASED ON 100 GRAMS OF PRODUCT FOR 13 SAMPLE UNITS, 100×13=1300 UNITS

Sample Units × Sample Unit Size	1×100	3×100	6×100	13×100	21×100	29×100
Grams of Product	100	300	600	1300	2100	2900

Defects	AQL	TOL						
	Grade A		Acceptance numbers (grams)					
Major Blemished	3.8	5.0	7	17	31	61	94	127
Total Blemished (Major & Minor)	8.2	10.0	13	33	61	123	194	263
Fuzzy Character	1.3	2.0	3	7	12	23	36	48
Ricey Character	8.2	10.0	13	33	61	123	194	263
Soft Character	0.612	1.0	2	4	7	12	19	24
Major Color Defect	2.17	3.0	4	11	19	37	56	76
Total Color Defect (Major & Minor)	8.2	10.0	13	33	61	123	194	263
Core Material	2.17	3.0	4	11	19	37	56	76
Fragments	3.8	5.0	7	17	31	61	94	127
Mechanical Damage	8.2	10.0	13	33	61	123	194	263
Loose Leaves (each piece)	3.8	5.0	7	17	31	61	94	127
	Grade B		Acceptance numbers (grams)					
Major Blemished	8.2	10.0	13	33	61	123	194	263
Total Blemished (Major & Minor)	13.0	15.0	18	48	91	189	298	407
Fuzzy Character	6.4	8.0	10	26	48	98	153	208
Ricey Character	13.0	15.0	18	48	91	189	298	407
Soft Character	2.9	4.0	6	13	24	48	74	99
Major Color Defect	6.4	8.0	10	26	48	98	153	208
Total Color Defect (Major & Minor)	13.8	16.0	19	51	96	200	316	430
Core Material	2.17	3.0	4	11	19	37	56	76
Fragments	3.8	5.0	7	17	31	61	94	127
Mechanical Damage	17.6	20.0	24	63	121	251	398	544
Loose Leaves (each piece)	6.4	8.0	10	26	48	98	153	208

§52.728 Sample size.

The sample size used to determine whether the requirements of these standards are met shall be as specified in the sampling plans and procedures in the ''Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Products'' (7 CFR 52.1 through 52.83).

§52.729 Acceptance criteria.

(a) *Style.* A lot of frozen cauliflower, is considered as meeting the requirements for style if the requirements in §52.723, as applicable, are not exceeded.

(b) *Quality Factors.* A lot of frozen cauliflower is considered as meeting the requirements for quality if:

(1) The prerequisites specified in §52.726 are met; and

(2) The Acceptance Numbers in Table I or II in §52.727, as applicable, are not exceeded.

(c) *Single Sample Unit.* Each unofficial sample unit submitted for quality evaluation will be treated individually and is considered as meeting requirements for quality and style if:

(1) The prerequisites specified in §52.726 are met; and

(2) The requirements for style in §52.723 and the Acceptable Quality Levels (AQL's) in Tables I & II in §52.727, as applicable, are not exceeded.

Subpart—United States Standards for Grades of Canned Red Tart Pitted Cherries[1]

SOURCE: 39 FR 13963, Apr. 18, 1974, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

IDENTITY AND GRADES

§52.771 Identity.

Canned red tart pitted cherries is the product represented as defined in the

[1] Compliance with the provisions of the standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable State laws and regulations.

standard of identity for canned cherries (21 CFR 145.125(a)), issued pursuant to the Federal Food, Drug, and Cosmetic Act, and packed in one of the liquid media specified in § 52.773; and is sealed in a hermetically sealed container and so processed by heat as to prevent spoilage.

§ 52.772 Grades.

(a) ''U.S. Grade A'' (or ''U.S. Fancy'') is the quality of canned red tart pitted cherries that have at least the following attributes:

(1) At least a reasonably good color;
(2) Practically free from pits;
(3) Practically free from defects;
(4) Good character;
(5) Normal flavor and odor; and
(6) Score not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

Canned red tart pitted cherries of this grade may contain not more than eight cherries per sample unit that are less than 9/16 inch (14 mm) in diameter.

(b) ''U.S. Grade B'' (or ''U.S. Choice'') is the quality of canned red tart pitted cherries that have at least the following attributes:

(1) Reasonably good color;
(2) Reasonably free from pits;
(3) Reasonably free from defects;
(4) Reasonably good character;
(5) Normal flavor and odor; and
(6) Score not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

Canned red tart pitted cherries of this grade may contain not more than 15 cherries per sample unit that are less than 9⁄16 inch (14 mm) in diameter.

(c) ''U.S. Grade C'' (or ''U.S. Standard'') is the quality of canned red tart pitted cherries that have at least the following attributes:

(1) Fairly good color;
(2) Fairly free from pits;
(3) Fairly free from defects;
(4) Fairly good character;
(5) Normal flavor and odor; and
(6) Score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

There is no size requirement for canned red tart pitted cherries of this grade.

(d) ''Substandard'' is the quality of canned red tart pitted cherries that fail to meet the requirements of ''U.S. Grade C.''

LIQUID MEDIA AND BRIX MEASUREMENTS

§ 52.773 Liquid media and Brix measurements.

(a) Brix measurement requirements for the liquid media in canned red tart pitted cherries are not incorporated in the grades of the finished product since sirup, or any other liquid medium, as such, is not a factor of quality for the purpose of the grades. The designation of liquid packing media and Brix measurements, where applicable, are as follows:

Designations	Brix measurements
''Extra heavy sirup;'' or ''Extra heavily sweetened fruit juice(s) and water;'' or ''Extra heavily sweetened fruit juice(s).''.	28° or more but not more than 45°.
''Heavy sirup;'' or ''Heavily sweetened fruit juice(s) and water;'' or ''Heavily sweetened fruit juice(s).''.	22° or more but less than 28°.
''Light sirup;'' or ''Lightly sweetened fruit juice(s) and water;'' or ''Lightly sweetened fruit juice(s).''.	18° or more but less than 22.
''Slightly sweetened water;'' or ''Slightly sweetened fruit juice(s) and water;'' or ''Slightly sweetened fruit juice(s).''.	Less than 18°.
''In water''	Not applicable.
''In fruit juice(s) and water.''	Do.
''In fruit juice(s)''	Do.

(b) The densities of the packing media, as listed in this section, are measured on the refractometer, expressed as percent by weight sucrose (degrees Brix) with correction for temperature to the equivalent at 20° C. (68° F.), but without correction for invert sugars or other substances. The Brix measurement of the packing media may be determined by any other method which gives equivalent results.

(c) Brix determination is made on the packing media 15 days or more after the cherries are canned or on the blended homogenized slurry of the comminuted entire contents of the container if canned for less than 15 days.

[39 FR 13963, Apr. 18, 1974, as amended at 41 FR 15020, Apr. 9, 1976. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

FILL OF CONTAINER

§ 52.774 Fill of container.

(a) *FDA requirements.* Canned red tart pitted cherries shall meet the fill of

container requirements as set forth in the regulations of the Food and Drug Administration (21 CFR 145.125(c)).

(b) *Recommended minimum drained weights*—(1) *General.* The minimum drained weight recommendations for the various container sizes and types of packing media as listed in Table I of this section are not incorporated in the grades of the finished product since drained weight, as such, is not a factor of quality for the purpose of these grades.

(2) *Definitions.*

Sample average—Average of all the drained weights of the sample containers representing a lot.

X_d—A specified minimum sample average drained weight.

LL—Lower limit for individual container drained weight.

(3) *Method for ascertaining drained weight.* The drained weight of canned red tart pitted cherries is determined by emptying the contents of the container upon a U.S. Standard No. 8 circular sieve of proper diameter containing eight meshes to the inch (0.0937 inch (2.3 mm), ±3 percent, square openings) so as to distribute the product evenly over the sieve. Without shifting the product, incline the sieve at an angle of 17° to 20° to facilitate drainage and allow to drain for two minutes. The weight of drained cherries is the weight of the sieve and product less the weight of the dry sieve. A sieve eight inches in diameter is used for No. 3 size containers (404 × 414) and smaller, and a sieve 12 inches in diameter is used for containers larger than No. 3 size containers.

(4) *Compliance with recommended minimum drained weights.* A lot of canned red tart pitted cherries is considered as meeting the minimum drained weight recommendations when the following criteria are met:

(i) The sample average meets the specified minimum sample average drained weight (designated as ''X_d'' in Table I); and

(ii) The number of sample containers which fail to meet the minimum drained weight for individual containers (designated as ''LL'' in Table I) does not exceed the applicable acceptance number specified in Table II.

(c) *Recommended fill weights*—(1) *General.* The minimum fill weight recommendations for the various container sizes in Table III of this section are not incorporated in the grades of the finished product since fill weight, as such, is not a factor of quality for the purpose of these grades.

TABLE I—RECOMMENDED MINIMUM DRAINED WEIGHTS FOR CANNED RED TART PITTED CHERRIES

Container designation	Packed in water or cherry juice (ounces)		Packed in any sirup or slightly sweetened water (ounces)	
	LL	Xd	LL	Xd
No. 303 (303 × 406) ..	10.7	11.0	9.9	10.2
No. 303 Cylinder (303 × 509)	14.0	14.4	12.7	13.1
No. 2 (307 × 409)	13.1	13.5	12.3	12.7
No. 10 (603 × 700)	71.2	72.0	69.4	70.2

TABLE II—SINGLE SAMPLING PLANS AND ACCEPTANCE NUMBERS

Sample Size (No. of sample containers) ...	3	6	13	21	29	38	48	60
Acceptance numbers	0	1	2	3	4	5	6	7

(2) *Definitions.*

Subgroup	A group of sample containers representing a portion of a sample.
X'_{min}	A specified minimum lot average fill weight.
LWL^x	Lower warning limit for subgroup averages.
LRL_x	Lower reject limit for subgroup averages.
LWL	Lower warning limit for individual fill weight measurements.
LRL	Lower reject limit for individual fill weight measurements.
R′	A specified average range value.
R_{max}	A specified maximum range for subgroups.

(3) *Method for ascertaining fill weight.* The fill weight of canned red tart pitted cherries is determined in accordance with the U.S. Standards for Inspection by Variable and the U.S. Standards for Determination of Fill Weights.

(4) *Compliance with recommended fill weights.* Compliance with the recommended fill weights for canned red tart pitted cherries shall be in accordance with the U.S. Standards for Inspection by Variables and the U.S. Standards for Determination of Fill Weights.

TABLE III—RECOMMENDED FILL WEIGHT VALUES FOR CANNED RED TART PITTED CHERRIES

Container designation	Fill weight values in ounces							
	X'_{min}	LWL_x	LRL_x	LWL	LRL	R′	R_{max}	Sampling allowance code
No. 303	12.9	12.6	12.4	12.2	11.8	0.80	1.70	F
No. 303 Cylinder	16.8	16.4	16.2	15.9	15.4	1.10	2.20	H
No. 2	15.8	15.4	15.2	14.9	14.4	1.10	2.20	H
No. 10	86.7	85.9	85.5	85.0	84.1	2.00	4.20	P

SAMPLE UNIT SIZE

§ 52.775 Sample unit size.

Compliance with requirements for the size and the various quality factors is based on the following sample unit sizes for the applicable factor:

(a) Size, color, pits, and character—20 ounces of drained cherries.

(b) Defects (other than harmless extraneous material)—100 cherries.

(c) Harmless extraneous material—The total contents of each container in the sample.

FACTORS OF QUALITY

§ 52.776 Ascertaining the grade of a sample unit.

(a) *General.* The grade of a sample unit of canned red tart pitted cherries is ascertained by considering the factor of flavor and odor of the product and the requirement for size (in U.S. Grade A and U.S. Grade B) which are not scored; the ratings for the factors of color, freedom from pits, defects, and character, which are scored; and the limiting rules which may be applicable.

(b) *Factors rated by score points.* The relative importance of each factor which is scored is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Color	20
Freedom from pits	20
Defects	30
Character	30
Total score	100

(c) *Definition.* ''Normal flavor and odor'' means that the flavor and odor are characteristic of canned red tart pitted cherries and that the product is free from objectionable flavors and objectionable odors of any kind.

§ 52.777 Ascertaining the rating for the factors which are scored.

The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, ''18 to 20 points'' means 18, 19, or 20 points).

§ 52.778 Color.

(a) (*A*) *classification.* Canned red tart pitted cherries that have a good color may be given a score of 18 to 20 points. ''Good color'' means a practically uniform color that is bright and typical of canned red tart pitted cherries which have been prepared and processed from properly ripened cherries.

(b) (*B*) *classification.* Canned red tart pitted cherries that have a reasonably good color may be given a score of 16 or 17 points. ''Reasonably good color'' means a reasonably uniform color, typical of canned red tart pitted cherries which have been properly prepared and processed and which color may range from a slight yellowish-red color to a slightly mottled reddish brown.

(c) (*C*) *classification.* Canned red tart pitted cherries that have a fairly good color may be given a score of 14 or 15 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly good color'' means a fairly uniform color typical of canned red tart pitted cherries which have been properly processed and which color may range

from a brownish cast to mottled shades of brown.

(d) (*SStd.*) *classification.* Canned red tart pitted cherries that fail to meet the color requirements for U.S. Grade C may be given a score of 0 to 15 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.779 Freedom from pits.

(a) *General.* The factor of freedom from pits refers to the incidence of pits and pit fragments.

(b) *Definitions.* (1) A *pit,* for the purposes of the allowances in this section, is a whole cherry pit or portions of pits computed as follows:

(i) A single piece of pit shell, whether or not within or attached to a whole cherry, that is larger than one-half pit shell is considered as one pit;

(ii) A single piece of pit shell, whether or not within or attached to a whole cherry, that is not larger than one-half pit shell is considered as one-half pit;

(iii) Pieces of pit shell, within or attached to a whole cherry, when their combined size is larger than one-half pit shell are considered as one pit; and

(iv) Pieces of pit shell, within or attached to a whole cherry, when their combined size is not larger than one-half pit shell are considered as one-half pit.

(2) *Drained cherries* means pitted cherries that have been drained of packing medium by the method prescribed in this subpart.

(c) (*A*) *classification.* Canned red tart pitted cherries that are practically free from pits may be given a score of 18 to 20 points. ''Practically free from pits'' means that the number of pits that may be present in the drained cherries does not exceed the allowances for this classification as set forth in Table IV.

(d) (*B*) *classification.* Canned red tart pitted cherries that are reasonably free from pits may be given a score of 16 or 17 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably free from pits'' means that the number of pits that may be present does not exceed the allowances for this classification as set forth in Table IV.

(e) (*C*) *classification.* Canned red tart pitted cherries that are fairly free from pits may be given a score of 14 or 15 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly free from pits'' means that the number of pits that may be present in the drained cherries does not exceed the allowances for this classification as set forth in Table IV.

(f) (*SStd.*) *classification.* Canned red tart pitted cherries that fail to meet the requirements of U.S. Grade C may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.780 Defects.

(a) *General.* The factor of defects refers to the degree of freedom from harmless extraneous material, mutilated cherries, and cherries blemished by scab, hail injury, discoloration, scar tissue, or by other means.

(1) *Cherry* means a whole cherry, whether or not pitted, or portions of such cherries which in the aggregate approximate the average size of the cherries.

(2) *Harmless extraneous material* means any vegetable substance (including, but not being limited to, a leaf or a stem, and any portions thereof) that is harmless.

(3) *Mutilated cherry* means a cherry that is so pitter-torn or damaged by other means that the entire pit cavity is exposed and the appearance of the cherry is seriously affected.

(4) *Minor blemished cherry* means any cherry blemished with skin discoloration (other than scald) having an aggregate area of a circle 9/32 inch (7 mm) or less in diameter which more than slightly affects the appearance of the cherry but does not extend into the fruit tissue.

(5) *Blemished cherry* means any cherry blemished by skin discoloration (other than scald) which in the aggregate exceeds the area of a circle 9/32 inch (7 mm) in diameter. A cherry affected by skin discoloration extending into the fruit tissue or by scab, hail injury, scar

tissue, or other abnormality, regardless of size, is considered a blemished cherry.

(b) (*A*) *classification*. Canned red tart pitted cherries that are practically free from defects may be given a score of 27 to 30 points. ''Practically free from defects'' means that the number of defects that may be present does not exceed the number specified for the type of defects in Table IV.

(c) (*B*) *classification*. Canned red tart pitted cherries that are reasonably free from defects may be given a score of 24 to 26 points. Canned red tart pitted cherries that fall into this classification may not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably free from defects'' means that the number of defects that may be present does not exceed the number specified for the type of defects in Table IV.

(d) (*C*) *classification*. If the canned red tart pitted cherries are fairly free from defects, a score of 21 to 23 points may be given. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly free from defects'' means that the number of defects that may be present does not exceed the number specified for the type of defects in Table IV.

(e) (*SStd.*) *classification*. Canned red tart pitted cherries that fail to meet the requirements for Grade C for any reason may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.781 Character.

(a) *General*. The factor of character refers to the physical characteristics of the flesh of the cherries.

(b) (*A*) *classification*. Canned red tart pitted cherries that have a good character may be given a score of 27 to 30 points. ''Good character'' means that the cherries are thick-fleshed and have a firm, tender texture.

(c) (*B*) *classification*. Canned red tart pitted cherries that have a reasonably good character may be given a score of 24 to 26 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably good character'' means that the cherries may be reasonably thick-fleshed and may be slightly soft.

(d) (*C*) *classification*. Canned red tart pitted cherries that have a fairly good character may be given a score of 21 to 23 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly good character'' means that the cherries may be thin-fleshed, and may be soft but not mushy, or slightly tough but not leathery.

(e) (*SStd.*) *classification*. Canned red tart pitted cherries that fail to meet the requirements for U.S. Grade C may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

ALLOWANCES FOR QUALITY FACTORS

§ 52.782 Allowances for quality factors.

TABLE IV—ALLOWANCES FOR QUALITY FACTORS

Factor	Sample unit size	Maximum number permissible for the respective grade					
		A	A	B	B	C	C
Pits	20 ozs	Not more than 2 in any sample unit.	Sample average 1 per 40 ozs.	Not more than 3 in any sample unit.	Sample average 1 per 30 ozs.	4 or more in any sample unit.	Sample average 1 per 20 ozs.
Defects:	100 cherries					.	
Total—multilated, plus minor blemished plus blemished..		10		15		20.	
of which							
Blemished—limited to		3		7		15.	

TABLE IV—ALLOWANCES FOR QUALITY FACTORS—Continued

Factor	Sample unit size	Maximum number permissible for the respective grade					
		A	A	B	B	C	C
Harmless extraneous material.	Total contents	Average 1 piece per 60 oz. net contents.	.....	Average 1.5 pieces per 60 oz. net contents.	.....	Average 3 piece per 60 oz. net contents.	

LOT COMPLIANCE

§52.783 Ascertaining the grade of a lot.

The grade of a lot of canned red tart pitted cherries covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (§§52.1 to 52.87).

SCORE SHEET

§52.784 Score sheet for canned red tart pitted cherries.

Size and kind of container	.....
Container mark or identification	.....
Label	.....
Net weight (ounces)	.....
Vacuum (inches)	.....
Drained weight (ounces)	.....
Sirup designation (extra heavy, heavy, etc.)	.....
Brix measurement	.....
Size [1]	.....

Factors			Score points
Color	20	(A)	18–20
		(B)	16–17
		(C)	[2] 14–15
		(SStd.)	[2] 0–13
Freedom from pits.	20	(A)	18–20
		(b)	[2] 16–17
		(C)	[2] 14–15
		(SStd.)	[2] 0–13
Freedom from defects.	30	(A)	27–30
		(B)	[2] 24–26
		(C)	[2] 21–23
		(SStd.)	[2] 0–20
Character	30	(A)	27–30
		(B)	[2] 24–26
		(C)	[2] 21–23
		(SStd.)	[2] 0–20
Total score	100		

Normal flavor	.....
Grade	.....

[1] See size limitation for U.S. Grade A and U.S. Grade B.
[2] Indicates limiting rule.

Subpart—United States Standards for Grades of Frozen Red Tart Pitted Cherries

SOURCE: 39 FR 23235, June 27, 1974, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

PRODUCT DESCRIPTION AND GRADES

§52.801 Product description.

Frozen red tart pitted cherries is the food prepared from properly matured cherries of the domestic (Prunus cerasus) red sour varietal group which have been washed, pitted, sorted, and properly drained; may be packed with or without a nutritive sweetened packing medium or any other substance permitted under the Federal Food, Drug, and Cosmetic Act, and are frozen and stored at temperatures necessary for the preservation of the product.

§52.802 Grades of frozen red tart pitted cherries.

(a) ''U.S. Grade A'' (or ''U.S. Fancy'') is the quality of frozen red tart pitted cherries of which not more than five (5) cherries per sample unit may be less than 9/16 inch (14 mm) in diameter, and that:

(1) Possess a good red color;

(2) Are practically free from pits;

(3) Are practically free from defects;

(4) Have a good character;

(5) Possess a normal flavor; and

(6) Score not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

(b) ''U.S. Grade B'' (or ''U.S. Choice'') is the quality of frozen red tart pitted cherries of which not more than ten (10) cherries per sample unit may be less than 9/16 inch (14 mm) in diameter, and that:

(1) Possess a reasonably good red color;

(2) Are reasonably free from pits;

(3) Are reasonably free from defects;

(4) Have a reasonably good character:

(5) Possess a normal flavor; and

(6) Score not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

(c) ''U.S. Grade C'' (or ''U.S. Standard'') is the quality of frozen red tart pitted cherries that:

(1) Possess a fairly good red color;

(2) Are fairly free from pits;

(3) Are fairly free from defects;

(4) Have a fairly good character;

(5) Possess a normal flavor; and

(6) Score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

(d) ''Substandard'' is the quality of frozen red tart pitted cherries that fail to meet the requirements of U.S. Grade C.

SAMPLE UNIT SIZE

§ 52.803 Sample unit size.

Compliance with requirements for size and the various quality factors is based on the following sample unit sizes for the applicable factor:

(a) Pits, character, and harmless extraneous material—20 ounces of drained cherries.

(b) Size, color, and defects (other than harmless extraneous material)—100 cherries.

FACTORS OF QUALITY

§ 52.804 Ascertaining the grade of a sample unit.

(a) The grade of frozen red tart pitted cherries is determined immediately after thawing to the extent that the cherries may be separated easily and the cherries are free from ice and solidified packing media. The grade is determined by considering in addition to the requirements of the respective grade (including the requirement of the size in U.S. Grade A and U.S. Grade B), the respective ratings of the factors of color, pits, absence of defects, character, the total score, and the limiting rules which may be applicable.

(b) The relative importance of each factor is expressed numerically on a scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Color	30
Freedom from pits	20
Freedom from defects	20
Character	30
Total score	100

(c) *Normal flavor* means that the flavor is characteristic of frozen red tart pitted cherries and that the product is free from objectionable flavors of any kind.

§ 52.805 Ascertaining the rating for each factor.

The essential variations within each factor are so described that the value may be ascertained for each factor and expressed numerically. The numerical range for the rating of each factor is inclusive (for example, ''27 to 30 points'' means 27, 28, 29 or 30 points).

§ 52.806 Color.

(a) (*A*) *Classification*. Frozen red tart pitted cherries that possess a good red color may be given a score of 27 to 30 points. ''Good red color'' means that the frozen cherries possess a color that is bright and typical of properly ripened cherries and that is practically uniform in that the number of cherries that vary markedly from this color due to oxidation, improper processing, or other causes, or that are undercolored, does not exceed the number specified in Table I.

(b) (*B*) *Classification*. Frozen red tart pitted cherries that possess a reasonably good red color may be given a score of 24 to 26 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably good red color'' means that the cherries possess a color

that is reasonably bright and typical of properly ripened cherries and that is reasonably uniform in that the number of cherries that vary markedly from this color due to oxidation, improper processing, or other causes, or that are undercolored, does not exceed the number specified in Table I.

(c) (*C*) *Classification*. If the frozen red tart pitted cherries possess a fairly good red color, a score of 21 to 23 points may be given. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly good red color'' means that the frozen cherries possess a color that is fairly bright and typical of properly ripened cherries and that is fairly uniform in that the number of cherries that vary markedly from this color due to oxidation, improper processing, or other causes, or that are undercolored, does not exceed the number specified in Table I.

(d) (*SStd*.) *Classification*. Frozen red tart pitted cherries that fail to meet the requirements of U.S. Grade C may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.807 Freedom from pits.

(a) *General*. The factor of freedom from pits refers to the incidence of pits and pit fragments.

(b) *Definitions*. (1) A ''pit'' for the purpose of the allowances in this subpart is a whole pit or portions of pits computed as follows:

(i) A single piece of pit shell, whether or not within or attached to a whole cherry, that is larger than one-half pit shell is considered as one pit;

(ii) A single piece of pit shell, whether or not within or attached to a whole cherry, that is not larger than one-half pit shell is considered as one-half pit;

(iii) Pieces of pit shell, within or attached to a whole cherry, when their combined size is larger than one-half pit shell are considered as one pit; and

(iv) Pieces of pit shell, within or attached to a whole cherry, when their combined size is not larger than one-half pit shell are considered as one-half pit.

(2) *Drained cherries* means pitted cherries that are substantially free from any adhering sirup, sugar, or other packing medium.

(c) (*A*) *Classification*. Frozen red tart pitted cherries that are practically free from pits may be given a score of 18 to 20 points. ''Practically free from pits'' means that the number of pits that may be present does not exceed the allowances for this classification specified in Table I.

(d) (*B*) *Classification*. Frozen red tart pitted cherries that are reasonably free from pits may be given a score of 16 or 17 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably free from pits'' means that the number of pits that may be present does not exceed the number specified in Table I.

(e) (*C*) *Classification*. Frozen red tart pitted cherries that are fairly free from pits may be given a score of 14 or 15 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly free from pits'' means that the number of pits that may be present does not exceed the number specified in Table I.

(f) (*SStd*.) *Classification*. Frozen red tart pitted cherries that fail to meet the requirements for U.S. Grade C may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.808 Freedom from defects.

(a) *General*. The factor of freedom from defects refers to the degree of freedom from harmless extraneous material, mutilated cherries, and cherries blemished by scab, hail injury, discoloration, scar tissue, or by other means.

(1) *Cherry* means a whole cherry, whether or not pitted, or portions of such cherries which in the aggregate approximate the average size of the cherries.

(2) *Harmless extraneous material* means any vegetable substance (including, but not being limited to, a leaf or a stem

and any portions thereof) that is harmless.

(3) *Mutilated cherry* means a cherry that is so pitter-torn or damaged by other means that the entire pit cavity is exposed and the appearance of the cherry is seriously affected.

(4) *Minor blemished cherry* means any cherry blemished with discoloration (other than scald) having an aggregate area of a circle 9/32 inch (7 mm) or less in diameter which more than slightly affects the appearance of the cherry but does not extend into the fruit tissue.

(5) *Blemished cherry* means any cherry blemished by skin discoloration (other than scald) which in the aggregate exceeds the area of a circle 9/32 inch (7 mm) in diameter. A cherry affected by skin discoloration extending into the fruit tissue or by scab, hail injury, scar tissue, or other abnormality, regardless of size, is considered a blemished cherry.

(b) (*A*) *Classification*. Frozen red tart pitted cherries that are practically free from defects may be given a score of 18 to 20 points. ''Practically free from defects'' means that the number of defects that may be present does not exceed the number specified for the applicable type of defect in Table I.

(c) (*B*) *Classification*. Frozen red tart pitted cherries that are reasonably free from defects may be given a score of 16 or 17 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably free from defects'' means that the number of defects that may be present does not exceed the number specified for the applicable type of defect in Table I.

(d) (*C*) *Classification*. Frozen red tart pitted cherries that are fairly free from defects may be given a score of 14 or 15 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly free from defects'' means that the number of defects that may be present does not exceed the number specified for the applicable type of defect in Table I.

(e) (*SStd.*) *Classification*. Frozen red tart pitted cherries that fail to meet the requirements for Grade C may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.809 Character.

(a) *General*. The factor of character refers to the physical characteristics of the flesh of the cherries.

(b) (*A*) *Classification*. Frozen red tart pitted cherries that have a good character may be given a score of 27 to 30 points. ''Good character'' means that the cherries are thick-fleshed and have a firm, tender texture.

(c) (*B*) *Classification*. Frozen red tart pitted cherries that have a reasonably good character may be given a score of 24 to 26 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably good character'' means that the cherries may be reasonably thick-fleshed and slightly soft.

(d) (*C*) *Classification*. Frozen red tart pitted cherries that have a fairly good character may be given a score of 21 to 23 points. Frozen red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly good character'' means that the cherries may be thin-fleshed and may be soft but not mushy, or slightly tough but not leathery.

(e) (*SStd.*) *Classification*. Frozen red tart pitted cherries that fail to meet the requirements for Grade C may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

ALLOWANCES FOR QUALITY FACTORS

§ 52.810 Allowances for quality factors.

TABLE I—ALLOWANCES FOR QUALITY FACTORS

Factor	Sample unit size	Maximum number permissible for the respective grade		
		A	B	C
Color:				
Vary markedly or undercolored.	100 cherries	12	18	25.
Pits	20 ozs	Not more than 2 in any sample unit. Sample average 1 per 40 ozs.	Not more than 3 in any sample unit. Sample average 1 per 30 ozs.	4 or more in any sample unit. Sample average 1 per 20 ozs.
Defects:				
Total-mutilated, minor blemished, and blemished of which.	100 cherries	10	15	20.
Blemished—limited to		3	7	15.
Harmless extraneous material.	20 ozs	Average 1 piece per 60 oz. net contents.	Average 1 piece per 40 oz. net contents.	Average 1 piece per 20 oz. net contents.

LOT COMPLIANCE

§ 52.811 Ascertaining the grade of a lot.

The grade of a lot of frozen red tart pitted cherries covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (§§ 52.1 through 52.83).

SCORE SHEET

§ 52.812 Score sheet for frozen red tart pitted cherries.

Size and kind of container .....
Container mark or identification .....
Label (style of pack, ratio of fruit to sugar, etc., if shown).
Net weight (ounces) .....
Size [1] .....

Factor			Score points
Color	30	(A)	27–30
		(B)	[2] 24–26
		(C)	[2] 21–23
		(SStd.)	[2] 0–20
Freedom from pits	20	(A)	18–20
		(B)	[2] 16–17
		(C)	[2] 14–15
		(SStd.)	[2] 0–13
Freedom from defects	20	(A)	18–20
		(B)	[2] 16–17
		(C)	[2] 14–15
		(SStd.)	[2] 0–13
Character	30	(A)	27–30
		(B)	[2] 24–26
		(C)	[2] 21–23
		(SStd.)	[2] 0–20
Total score	100		

Normal flavor ....
Grade ....

[1] See size limitation for U.S. Grade A and U.S. Grade B.
[2] Indicates limiting rule.

Subpart—United States Standards for Grades of Dates

SOURCE: 20 FR 5755, Aug. 10, 1955, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

PRODUCT DESCRIPTION, STYLES, AND GRADES

§ 52.1001 Product description.

Dates are the properly cured fresh fruit of the date tree (Phoenix dactylifera) which may or may not be softened by hydration. For the purposes of the standards in this subpart, dates, when referred to as ''dry dates for processing,'' means that the dates are dry and have not been softened by hydration.

§ 52.1002 Styles of dates.

(a) *Whole* or *whole dates* means whole unpitted dates from which the pits have not been removed and which may be slit longitudinally.

(b) *Pitted* or *pitted dates* means whole dates from which the pits have been removed.

(c) *Pieces* or *date pieces* means dates that have been cut or sliced into small pieces and that can be handled as individual units.

(d) *Macerated* or *macerated dates* means dates that have been ground, chopped, mashed, or broken or that have been cut or sliced into small pieces and that cannot be handled as individual units.

§ 52.1003 Grades of dates.

(a) *U.S. Grade A* or *U.S. Fancy* is the quality of whole or pitted dates that are of one variety, that possess a good color, that are practically uniform in size, that are practically free from defects, that possess a good character, and that score not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

(b) *U.S. Grade B* or *U.S. Choice* is the quality of whole or pitted dates other than whole dry dates for processing that are of one variety, that possess a reasonably good color, that are reasonably uniform in size, that are reasonably free from defects, that possess a reasonably good character, and that score not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

(c) *U.S. Grade B (Dry)* or *U.S. Choice (Dry)* is the quality of whole dry dates for processing that are of one variety, that possess a reasonably good color, that are reasonably uniform in size, that are reasonably free from defects, that possess a reasonably good character, and that score not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

(d) *U.S. Grade C* or *U.S. Stand- ard* is the quality of whole or pitted dates other than whole dry dates for processing that are of one variety or of date pieces or macerated dates that possess a fairly good color, that are fairly uniform in size except for date pieces or macerated dates, that are fairly free from defects, that possess a fairly good character, and that score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

(e) *U.S. Grade C (Dry)* or *U.S. Standard (Dry)* is the quality of whole dry dates for processing that are of one variety, that possess a fairly good color, that are fairly uniform in size, that are fairly free from defects, that possess a fairly good character, and that score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

(f) *Substandard* is the quality of dates that fail to meet the requirements of U.S. Grade C or U.S. Stand- ard or U.S. Grade C (Dry) or U.S. Standard (Dry), whichever is applicable.

FACTORS OF QUALITY

§ 52.1004 Ascertaining the grade.

In addition to considering other requirements outlined in the standards, the following quality factors are evaluated:

(a) *Factor not related by score points.* (1) Varietal requirement.

(b) *Factors rated by score points.* The relative importance of each factor which is scored is expressed numerically on the scale of 100. The maximum number of points that may be given such factors are:

	Points
(1) Color	20
(2) Uniformity of size	10
(3) Absence of defects	30
(4) Character	40
Total score	100

§ 52.1005 Ascertaining the rating for the factors which are scored.

The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, ''18 to 20 points'' means 18, 19, or 20 points).

§ 52.1006 Color.

(a) (*A*) *classification.* Whole or pitted dates that possess a good color may be given a score of 18 to 20 points. ''Good color'' means that the color of the dates is practically uniform; and, with

respect to dates that are predominantly light amber in color, there may be not more than 5 percent by count of dates that are dark amber in color; and, with respect to dates that are predominantly dark amber in color, there may be not more than 5 percent by count of dates that are light amber in color.

(b) (*B*) *classification*. If the whole or pitted dates or whole dry dates for processing possess a reasonably good color, a score of 16 or 17 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice or U.S. Grade B (Dry) or U.S. Choice (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule). ''Reasonably good color'' means that the color of the whole or pitted dates or whole dry dates for processing is reasonably uniform for the type; and, with respect to dates that are predominantly light amber in color, there may be not more than 10 percent by count of dates that are dark amber in color; and, with respect to dates that are predominantly dark amber in color, there may be not more than 10 percent by count of dates that are light amber in color.

(c) (*C*) *classification*. If the whole or pitted dates, whole dry dates for processing, date pieces, or macerated dates possess a fairly good color, a score of 14 or 15 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard or U.S. Grade C (Dry) or U.S. Standard (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule). ''Fairly good color'' has the following meanings with respect to the following styles:

(1) *Whole; pitted*. The color of the whole or pitted dates or whole dry dates for processing is fairly uniform for the type; and, with respect to dates that are predominantly light amber in color, there may be not more than 20 percent by count of dates that are dark amber in color; and, with respect to dates that are predominantly dark amber in color, there may be not more than 20 percent by count of dates that are light amber in color.

(2) *Pieces; macerated*. The color may be variable throughout the units or mass, may be slightly dull but not off-color, and is typical of properly prepared dates of these styles.

(d) (*SStd*) *classification*. Dates that fail to meet the requirements of paragraph (c) of this section may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.1007 Uniformity of size.

(a) *General*. The factor of uniformity of size applies only to whole and pitted styles. The factor of uniformity of size in the styles of date pieces and macerated dates is not based on any detailed requirements and is not scored; the other three factors (color, absence of defects, and character is applicable) are scored and the total is multiplied by 100 and divided by 90, dropping any fractions to determine the total score.

(b) (*A*) *classification*. Whole or pitted dates that are practically uniform in size may be given a score of 9 or 10 points. ''Practically uniform in size'' means that not more than a total of 10 percent, by weight, of the whole or pitted dates may be conspicuously larger or smaller than the approximate average size of the dates in the container.

(c) (*B*) *classification*. If the whole or pitted dates or whole dry dates for processing are reasonably uniform in size, a score of 8 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice or U.S. Grade B (Dry) or U.S. Choice (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule). ''Reasonably uniform in size'' means that not more than a total of 15 percent, by weight, of the whole or pitted dates may be conspicuously larger or smaller than the approximate average size of the dates in the container.

(d) (*C*) *classification*. If the whole or pitted dates or whole dry dates for processing are fairly uniform in size, a score of 7 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard or U.S. Grade C (Dry) or U.S. Standard (Dry), whichever is applicable, regardless of the total score

for the product (this is a limiting rule). ''Fairly uniform in size'' means that not more than a total of 20 percent, by weight, of the whole or pitted dates may be conspicuously larger or smaller than the approximate average size of the dates in the container.

(e) (*SStd*) *classification*. Whole or pitted dates or whole dry dates for processing that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 6 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.1008 Absence of defects.

(a) *Definitions of defects*. Unless otherwise stated specifically, the following definitions of defects or defective units apply only to whole or pitted dates or whole dry dates for processing, as applicable for the type:

(1) *Damaged by discoloration* is the presence of a dark area in the flesh of the date, which dark area is visible through the skin and is more than one-fourth (¼) inch in width and extends more than the equivalent of half the length of the date, such darkening being of natural origin and not caused by mold or other organism.

(2) *Damaged by broken skin* is any rupture of the skin in a manner to expose the flesh of the date, the short- est dimension of such exposed area being not less than three-sixteenths (3⁄16) inch.

(3) *Damaged by checking* is the presence of fine lines, resulting from water injury, affecting the surface of the skin over an area not less than one-fourth of the total surface of the date.

(4) *Seriously damaged by checking* is the presence of heavy lines, resulting from water injury, seriously affecting the surface of the skin over an area not less than one-fourth of the total surface of the date.

(5) *Damaged by deformity* is any abnormal shape sufficient to produce an appearance discernibly at variance with the normal shape that is typical of the variety.

(6) *Damaged by puffiness* is the condition of a date of which the skin is soft and pliable and from which the skin is separated from the flesh in a balloon-like fashion, over an area not less than one-half of the total surface of the date. Soft skins which have returned and adhere to the flesh of the date are not considered ''damaged by puffiness.''

(7) *Seriously damaged by puffiness* is the condition of a date of which the skin is dry, hard, and brittle and from which the skin is separated from the flesh over an area not less than one-half of the total surface of the date.

(8) *Damaged by scars* are any blemishes that affect the exterior of the date and which are not less than three-sixteenths (3⁄16) inch in the shortest dimension.

(9) *Damaged by sunburn* is an area, usually light in color, scarred by the heat of the sun, such area being not less than three-sixteenths (3⁄16) inch in the shortest dimension.

(10) *Damaged by insect injury* is any blemish, resulting from the activity of insects or mites, distributed over an area of not less than one-fourth of the total surface of the date or any similar blemish that materially affects the appearance or edibility of the unit, regardless of the area affected.

(11) *Damaged by improper hydrating* means that the date has been injured by excessive heat or that the hydrating process is incomplete.

(12) *Damaged by mashing* means any physical injury to the flesh and skin of the date leaving the date partially mangled but otherwise whole.

(13) *Damaged by mechanical injury* means excessive trimming or similar injury that damages the appearance or that damages or affects the eating quality of the whole date.

(14) *Damaged by lack of pollination* means, with respect to whole dates, that pollination of the date was not accomplished, such condition being manifested by the absence of a pit in the whole dates or by thin, immature appearance of the date.

(15) *Damaged by blacknose* is severe checking in which the flesh becomes dark, crusty, and dry and which severe checking affects an area greater than one-eighth of the total surface of the date.

(16) *Damaged by side spot* means a very dark area, which generally is circular in appearance, extending into the flesh of the date, and, when decayed tissue or mold is not present, affecting in the aggregate an area not less than

the area of a circle three-sixteenths (3/16) inch in diameter.

(17) *Damaged by black scald* means the collapse, death, and blackening of the flesh along the side of the date, usually accompanied by a bitter taste in the affected area.

(18) *Damage by improper ripening* means pronounced evidence of ''green shrivel'' of the date or that the date possesses a puffy flesh or a decidedly rubbery texture resulting from failure of the tissue of the date to reach a desirable state of maturity due to climatic or cultural injury, or both.

(19) *Damaged by other defects* means any injury or defect or group of defects not defined in this section (such as, but not limited to, heavy sugaring, and excessive scars not described in the definition ''damaged by scars,'') which materially affect the appearance, edibility, or keeping quality of the dates.

(20) *Affected by scouring* is evidenced by the breakdown of the sugars into alcohol and acetic acid by yeasts and bacteria.

(21) *Affected by mold* is the presence of visible mold.

(22) *Affected by dirt* is the presence of any quantity of such substance.

(23) *Affected by insect infestation* is the presence of dead insects, insect parts, or excreta. (No live insects are permitted.)

(24) *Affected by foreign material* is the presence of any quantity of such substance.

(25) *Affected by decay* is a state of decomposition.

(b) (*A*) *classification*. Whole or pitted dates that are practically free from defects may be given a score of 27 to 30 points. ''Practically free from defects'' means that in pitted dates there may be present not more than one whole pit or two pit fragments for each 25 ounces of pitted dates; and that the whole or pitted dates do not exceed the total allowances and limitations shown in Chart I of this subpart.

(c) (*B*) *classification*. If the whole or pitted dates or whole dry dates for processing are reasonably free from defects, a score of 24 to 26 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice or U.S. Grade B (Dry) or U.S. Choice (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule). ''Reasonably free from defects'' means that in pitted dates there may be present not more than one whole pit or two pit fragments for each 25 ounces of pitted dates; and that the whole or pitted dates or whole dry dates for processing do not exceed the total allowances and limitations shown in Chart II of this subpart.

(d) (*C*) *classification*. If the whole or pitted dates, whole dry dates for processing, date pieces, or macerated dates are fairly free from defects, a score of 21 to 23 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard or U.S. Grade C (Dry) or U.S. Standard (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule). ''Fairly free from defects'' has the following meanings with respect to the following styles:

(1) *Whole*. The defects or defective units in whole dates or whole dry dates for processing do not exceed the total allowances and limitations shown in Chart III of this subpart.

(2) *Pitted*. Not more than one whole pit or two pit fragments for each 25 ounces of pitted dates may be present; and the defects or defective units in pitted dates do not exceed the total allowances and limitations shown in Chart III of this subpart.

(3) *Pieces; macerated*. Not more than one whole pit or two pit fragments for each 25 ounces of pitted dates may be present; and the units or mass consists of clean and sound date material, fairly free from defects that seriously affect the appearance, edibility, or keeping quality of the product.

(e) (*SStd*) *classification*. Dates that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

CHART NO. I—ALLOWANCES AND LIMITATIONS FOR DEFECTS IN WHOLE AND PITTED DATES (OTHER THAN WHOLE DRY DATES FOR PROCESSING); U.S. GRADE A OR U.S. FANCY

TOTAL ALLOWANCE

Not more than a total of 10 percent, by weight of the dates, may be the following:

Damaged by:
- Discoloration.
- Broken skin.
- Checking.
- Deformity.
- Puffiness.
- Scars.
- Sunburn.
- Insect injury.
- Improper hydrating.
- Mashing.
- Mechanical injury.
- Lack of pollination.
- Blacknose.
- Side spot.
- Black scald.
- Improper ripening.
- Other defects.

Seriously damaged by checking.
Seriously damaged by puffiness.
Affected by:
- Souring.
- Mold.
- Dirt.
- Insect infestation.
- Foreign material.
- Decay.

LIMITATIONS

Not more than 3/5 of the total allowance or 6 percent, by weight of the dates, may be the following:

Damaged by:
- Side spot.
- Black scald.
- Improper ripening.
- Other defects.

Affected by:
- Souring.
- Mold.
- Dirt.
- Insect infestation.
- Foreign material.
- Decay.

Not more than 2/5 of the total allowance, or 4 percent, by weight of the dates, may be the following:

Damaged by:
- Improper ripening.
- Other defects.

Affected by:
- Souring.
- Mold.
- Dirt.
- Insect infestation.
- Foreign material.
- Decay.

Not more than 1/10 of the total allowance, or 1 percent, by weight of the dates, may be:

Affected by decay.

CHART NO. II—ALLOWANCES AND LIMITATIONS FOR DEFECTS IN WHOLE AND PITTED DATES OR IN WHOLE DRY DATES FOR PROCESSING; U.S. GRADE B OR U.S. CHOICE AND U.S. GRADE B (DRY) OR U.S. CHOICE (DRY)

Not more than 15 percent, by weight of the dates, may be seriously damaged by checking.

Not more than 20 percent, by weight of the dates, may be damaged by broken skin.

ADDITIONAL ALLOWANCE

Not more than a total of 15 percent, by weight of the dates, may be the following:

Damaged by:
- Deformity.
- Puffiness.
- Scars.
- Sunburn.
- Insect injury.
- Improper hydrating.
- Mashing.
- Mechanical injury.
- Lack of pollination.
- Blacknose.
- Side spot.
- Black scald.
- Improper ripening.
- Other defects.

Seriously damaged by puffiness.
Affected by:
- Souring.
- Mold.
- Dirt.
- Insect infestation.
- Foreign material.
- Decay.

LIMITATIONS

Not more than 2/3 of the additional allowance, or 10 percent, by weight of the dates, may be the following:

Damaged by:
- Lack of pollination.
- Blacknose.
- Side spot.
- Black scald.
- Improper ripening.
- Other defects.

Affected by:
- Souring.
- Mold.
- Dirt.
- Insect infestation
- Foreign material.
- Decay.

Not more than ⅓ of the additional allowance, or 5 percent, by weight of the dates, may be the following:

Damaged by:
Improper ripening.
Other defects.
Affected by:
Souring.
Mold.
Dirt.
Insect infestation.
Foreign material.
Decay.

Not more than 1/15 of the additional allowance, or 1 percent, by weight of the dates, may be:

Affected by decay.

CHART NO. III—ALLOWANCES AND LIMITATIONS FOR DEFECTS IN WHOLE AND PITTED DATES OR IN WHOLE DRY DATES FOR PROCESSING; U.S. GRADE C OR U.S. STANDARD AND U.S. GRADE C (DRY) OR U.S. STANDARD (DRY)

TOTAL ALLOWANCE

Not more than a total of 20 percent, by weight of the dates, may be the following.

Damaged by:
Deformity.
Scars.
Sunburn.
Insect injury.
Improper hydrating.
Mashing.
Mechanical injury.
Lack of pollination.
Blacknose.
Side spot.
Black scald.
Improper ripening.
Other defects.
Seriously damaged by puffiness
Affected by:
Souring.
Mold.
Dirt.
Insect infestation.
Foreign material.
Decay.

LIMITATIONS

Not more than ½ of the total allowance, or 10 percent, by weight of the dates, may be the following.

Damaged by:
Lack of pollination
Blacknose.
Side spot.
Black scald.
Improper ripening.
Other defects.
Affected by:
Souring.
Mold.
Dirt.
Insect infestation.
Foreign material.
Decay.

Not more than ¼ of the total allowance, or 5 percent, by weight of the dates, may be the following:

Affected by
Souring.
Mold.
Dirt.
Insect infestation.
Foreign material.
Decay.

Not more than 1/10 of the total allowance, or 2 percent, by weight of the dates, may be:

Affected by decay.

§ 52.1009 Character.

(a) (*A*) *classification*. Whole or pitted dates that possess a good character may be given a score of 36 to 40 points. ''Good character'' means that not less than 75 percent, by weight, of the dates are well developed, well fleshed, and soft, or at the time of packing are in a state of ripeness that within 15 days will develop into such character; and the remainder may possess a reasonably good character including not more than a total of 2 percent, by weight, of the dates that may possess semi-dry calyx ends and none may possess dry calyx ends.

(b) (*B*) *classification*. If the whole or pitted dates or whole dry dates for processing possess a reasonably good character, a score of 32 to 35 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice or U.S. Grade B (Dry) or U.S. Choice (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule).

(1) ''Reasonably good character'' with respect to whole or pitted dates other than whole dry dates for processing means that the dates are pliable; that not less than 75 percent, by weight, of the dates are reasonably well developed and reasonably well fleshed, or at time of packing are in a state of ripeness that within 15 days will develop into such character and the remainder may possess a fairly good character including not more than 10 percent, by weight, of the dates that may possess semi-dry calyx ends and dry calyx

ends: *Provided,* That not more than 2 percent, by weight, of the dates may possess dry calyx ends.

(2) ''Reasonably good character'' with respect to whole dry dates for processing means that the dates may be firm and dry; that not less than 75 percent, by weight, of the dates are reasonably well developed and reasonably well fleshed and that the remainder are fairly well developed and fairly well fleshed.

(c) (*C*) *classification*. If the whole or pitted dates, whole dry dates for processing, date pieces, or macerated dates possess a fairly good character, a score of 28 to 31 points may be given. Dates that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard or U.S. Grade C (Dry) or U.S. Standard (Dry), whichever is applicable, regardless of the total score for the product (this is a limiting rule). ''Fairly good character'' has the following meanings with respect to the following styles:

(1) *Whole; pitted*. (i) In whole or pitted dates other than whole dry dates for processing the dates may be firm but are pliable; may possess semi-dry calyx ends; and not less than 80 percent, by weight, of the dates are fairly well developed and are fairly well fleshed, or at time of packing are in a state of ripeness that within 15 days will develop into such character and the remainder may fail to possess such fairly good character or may possess dry calyx ends.

(ii) In whole dry dates for processing the dates may be firm and dry but are fairly well developed and fairly well fleshed.

(2) *Pieces; macerated*. The character may be variable throughout the units or mass but not seriously affected by dry calyx end material or inedible portions of dates.

(d) (*SStd*) *classification*. Dates that fail to meet the requirements of paragraph (c) of this section may be given a score of 0 to 27 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

LOT INSPECTION AND CERTIFICATION

§ 52.1010 Ascertaining the grade of a lot.

The grade of a lot of the processed product covered by these standards is determined by the procedures set forth in the regulations governing inspection and certification of processed fruits and vegetables, processed products thereof, and certain other processed food products (§§ 52.1 to 52.87).

[22 FR 3547, May 22, 1957. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

SCORE SHEET

§ 52.1011 Score sheet for dates.

Size and kind of container	.....
Container mark or identification	.....
Label or brand	.....
Net weight	.....
Style	.....
Count (per lb.)	.....
Moisture content (if determined)	.....
One variety (☐) Yes (☐) No	.....

Factors		Score points	
Color	20	(A)	18–20
		(B) (B-Dry)	[1] 16–17
		(C) (C-Dry)	[1] 14–15
		(SStd)	[1] 0–13
Uniformity of size.	10	(A)	9–10
		(B) (B-Dry)	[1] 8
		(C) (C-Dry)	[1] 7
		(SStd)	[1] 0–6
Absence of defects.	30	(A)	27–30
		(B) (B-Dry)	[1] 24–26
		(C) (C-Dry)	[1] 21–23
		(SStd)	[1] 0–20
Character	40	(A)	36–40
		(B) (B-Dry)	[1] 32–35
		(C) (C-Dry)	[1] 28–31
		(SStd)	[1] 0–27
Total score	100		
Grade			.....

[1] Limiting rule.

Subpart—United States Standards for Grades of Frozen Okra

SOURCE: 34 FR 9697, June 21, 1969, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

PRODUCT DESCRIPTION, STYLES, AND GRADES

§52.1511 Product description.

Frozen okra is the product prepared from clean, sound, succulent, and edible fresh pods of the okra plant (Hibiscus esculentus) of the green variety. The product may or may not be trimmed, is properly prepared and properly processed, and is then frozen and stored at temperatures necessary for preservation.

[60 FR 62709, Dec. 7, 1995]

§52.1512 Styles of frozen okra.

(a) *Whole okra* consists of trimmed, or untrimmed whole pods of any length which may possess an edible portion of the cap. The length of a whole pod is determined by measuring from the outermost point of the tip end of the pod to the outermost point of the stem end of the pod, exclusive of any inedible stem portion which may be present.

(b) *Cut okra* is trimmed, or untrimmed whole pods, which may possess an edible portion of cap, and which have been cut transversely into pieces of approximate uniform length. The length of a unit of cut okra is determined by measuring the longitudinal axis of the unit.

[34 FR 9697, June 21, 1969. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981; amended at 60 FR 62709, Dec. 7, 1995]

§52.1513 Grades of frozen okra.

(a) ''U.S. Grade A'' (or ''U.S. Fancy'') is the quality of frozen okra that:

(1) Possesses similar varietal characteristics in all styles;

(2) Has a good flavor and odor;

(3) Has a good color;

(4) Is practically free from defects;

(5) Has a good character; and

(6) Scores not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

(b) ''U.S. Grade B'' (or ''U.S. Extra Standard'') is the quality of frozen okra that:

(1) Possesses similar varietal characteristics in the whole style;

(2) May or may not possess similar varietal characteristics in the cut style;

(3) Has a normal flavor and odor;

(4) Has a reasonably good color;

(5) Is reasonably free from defects;

(6) Has a reasonably good character; and

(7) Scores not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

(c) ''Substandard'' is the quality of frozen okra that fails to meet the requirements of U.S. Grade B.

FACTORS OF QUALITY

§52.1514 Ascertaining the grade of a sample unit.

(a) *General.* The grade of a sample unit of frozen okra is ascertained by considering the factors of varietal characteristics and flavor and odor which are not scored; the ratings for the factors of color, defects, and character, which are scored; the total score; and the limiting rules which apply.

(b) *Definitions.* (1) *Good flavor* means that the product, before and after cooking, has a good, distinctive flavor and odor, characteristic of young, tender okra and is free from any kind of objectionable flavor or objectionable odor.

(2) *Normal flavor* means that the product, before and after cooking, has a normal, typical flavor and odor, characteristic of properly prepared and processed okra and is free from any kind of objectionable flavor or objectionable odor.

(c) *Sample units.* (1) A ''sample unit'' of ''Whole'' okra shall be comprised of 50 pods of okra.

(2) A ''sample unit'' of ''Cut'' okra shall be comprised of 10 ounces of okra.

(d) *Evaluating quality factors.* The rating for the factors of color, defects, and character (with respect to pod and seed development), and the evaluation of similar varietal characteristics are determined immediately after thawing to the extent that the product is sufficiently free from ice crystals to permit proper handling as individual units. A representative sample is properly cooked (in sufficient unsalted water) to ascertain the tenderness of the units and freedom from fiber development

before final evaluation of character. Flavor and odor is evaluated on both the uncooked and cooked sample.

(e) *Application of percentages.* (1) The term ''percent'', or the symbol, ''%'', wherever used in this subpart, means: Percent, by count, in the ''Whole'' style of frozen okra and percent, by weight, in the ''Cut'' style of frozen okra.

(f) *Factors rated by score points.* The relative importance of each factor which is rated is expressed numerically on the scale of 100. The maximum number of points that may be given for each factor is:

Factors	Points
Color	30
Defects	40
Character	30
Total score	100

§ 52.1515 Ascertaining the rating of the factors which are scored.

The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example: 27 to 30 points means 27, 28, 29, or 30 points).

§ 52.1516 Color.

(a) (*A*) *Classification.* Frozen okra that possesses a good color may be given a score of 27 to 30 points. ''Good color'' means that the color of the frozen okra is bright, practically uniform, and typical of the varietal characteristic for young, tender okra. No more than 10 percent of the units in the sample unit may possess a slightly dull color, or possess a slight yellowish-green to brownish-green cast, or vary materially from the overall general, uniform color; and none of the units in the sample unit may possess a noticeable yellow or brown color or be ''off color.''

(b) (*B*) *Classification.* Frozen okra that possesses a reasonably good color may be given a score of 24 to 26 points. Frozen okra that falls into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably good color'' means that the frozen okra possesses a color which may be slightly dull but which is typical of the varietal characteristic for reasonably young and reasonably tender okra. No more than 20 percent of the units in the sample unit may possess a color that is typical of less than reasonably young and reasonably tender okra: *Provided,* That not more than 6 percent of the units in the sample unit may possess a noticeable yellow or brown color or vary markedly from the general, overall color; and none of the units may be ''off color.''

(c) (*SStd.*) *Classification.* Frozen okra that fails to meet the requirements of paragraph (b) of this section may be given a score of 0 to 23 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.1517 Defects.

(a) *Visual aids.* Color print photographs illustrative of certain types of defects defined in this subpart are available for review at specified USDA Processed Products Inspection offices. Information regarding the location of such offices is available upon request from:

Chief, Processed Products Standardization and Inspection Branch, Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, Washington, DC 20250.

(b) *General.* The factor of defects concerns the degree of freedom from units or any material as may be defined in paragraph (c) of this section or from any other defects present, whether or not specifically defined or listed therein, which would affect the appearance or edibility of the product.

(c) *Definitions of types of defects.* (1) *Insignificantly blemished unit* refers to very slight abnormalities, scars, discolorations, or any other imperfections on the individual unit which may affect the appearance slightly but which do not affect the edibility of the unit.

(2) *Blemished unit* means any unit which is so affected by discoloration or abnormalities, including trimmed or cut surfaces, as to materially affect the appearance of the unit.

(3) *Seriously blemished unit* means any unit which is so affected by discoloration or abnormalities, including

trimmed or cut surfaces, as to seriously affect the appearance or edibility of the unit.

(4) *Harmless extraneous material* consists of leaves, attached inedible stems in excess of one-half inch, detached stems of any length, and similar harmless plant material.

(5) *Poorly trimmed* units in the ''Whole'' style of frozen okra include, but are not limited to:

(i) Pods with attached inedible stems of one-half inch or less;

(ii) Pods possessing a conical-shaped or severely biased cut of the cap portion;

(iii) Trimmed pods with cut surface having very ragged edges;

(iv) Pods with partially detached cap portions;

(v) Pods with attached portions of cap that are inedible.

(6) *Poorly trimmed* units in the ''Cut'' style of frozen okra include, but are not limited to:

(i) Units with attached inedible stems of one-half inch or less;

(ii) Units with portions of cap that are inedible.

(7) *Excessively trimmed* are whole pods that:

(i) Have been so trimmed as to collapse the pod;

(ii) Have been so trimmed as to expose a longitudinal plane of the seed cavity;

(iii) Have been obviously trimmed on both ends.

(8) A *small piece* in *Whole* frozen okra means a piece of pod (exclusive of very small tip ends) which is one-fourth or less the weight of the smallest whole pod in the sample unit.

(9) *Small pieces* or *damaged pieces* in cut frozen okra means pieces of pods one-fourth inch in length or less, or units that may be broken, mashed, split, shattered, or improperly or incompletely cut so as to noticeably affect the appearance or edibility of the unit.

(10) *Damaged by mechanical injury* means whole pods or portions thereof that have been broken, mashed, split, or shattered to the extent that the appearance of the unit is noticeably affected.

(11) *Misshapen units* are whole pods which are seriously deformed.

(12) *Pathological or insect injury* refers to any unit that possesses obvious pathological or insect damage.

(13) *Sand, grit, or silt* means any particle of earthy material.

(d) (*A*) *Classification*. Frozen okra that is practically free from defects may be given a score of 36 to 40 points. ''Practically free from defects'' means that:

(1) Any defects present, whether or not specifically defined or listed herein, do not materially detract from the appearance or edibility of the product; and

(2) The defects that may be present in the sample unit do not exceed the allowances specified in table I.

(e) (*B*) *Classification*. Frozen okra that is reasonably free from defects may be given a score of 32 to 35 points. Frozen okra that falls into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably free from defects'' means that:

(1) Any defects present, whether or not specifically defined or listed herein, do not seriously detract from the appearance or edibility of the product; and

(2) The defects that may be present in the sample unit do not exceed the allowances specified in table I.

(f) (*SStd.*) *Classification*. Frozen okra that fails to meet the requirements of paragraph (e) of this section may be given a score of 0 to 31 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

TABLE I—ALLOWANCES FOR DEFECTS IN FROZEN OKRA

	Whole style (maximum—per 50 pods)		Cut style (maximum—per 10 ounces)	
	Grade A	Grade B	Grade A	Grade B
Blemished units; and seriously blemished units.	3 units, but not more than 1 unit seriously blemished.	6 units, but not more than 2 units seriously blemished.	6 units, but not more than 2 units seriously blemished.	12 units, but not more than 4 units seriously blemished.
Insignificantly blemished units	Do not more than slightly detract from the appearance.	Do not seriously detract from the appearance.	Do not more than slightly detract from the appearance.	Do not seriously detract from the appearance.
Harmless extraneous material	2 pieces	3 pieces	1 piece	2 pieces.
Poorly trimmed; excessively trimmed; small or damaged units; misshapen units; or any combination of these.	10 units	15 units	12 units	18 units.
Damaged by mechanical injury	5 units	10 units	Not applicable	Not applicable.
Pathological or insect injury	None	1 unit	1 unit	2 units.
Sand, grit, or silt	None	Trace	None	Trace.
Total: All defects above and any other defects or including above.	10 units, do not materially detract from the appearance.	15 units, do not seriously detract from the appearance.	12 units, do not materially detract from the appearance.	18 units, do not seriously detract from the appearance.

[34 FR 9697, June 21, 1969. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981, and amended at 60 FR 62709, Dec. 7, 1995]

§ 52.1518 Character.

(a) *General.* The factor of character refers to the development of the pods and seeds and to the degree of freedom from tough fiber. ''Tough fiber'' in frozen okra means any cooked unit that contains tough fibrous development to the extent that the eating quality of the unit is materially affected.

(b) (*A*) *Classification.* Frozen okra that possesses a good character may be given a score of 27 to 30 points. ''Good character'' means that the units are fleshy and tender, that the seeds are in the early stages of maturity, and that not more than 2 whole pods or 4 cut units (as applicable) per sample unit possess tough fibers.

(c) (*B*) *Classification.* Frozen okra that possesses a reasonably good character may be given a score of 24 to 26 points. Frozen okra that falls into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). ''Reasonably good character'' means that the units may have lost their fleshy texture to a considerable extent, that the units are reasonably tender, that the seeds may have passed the early stages of maturity, and that not more than 4 whole pods or 8 cut units (as applicable) per sample unit possess tough fibers.

(d) (*SStd.*) *Classification.* Frozen okra that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 23 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

LOT COMPLIANCE

§ 52.1519 Ascertaining the grade of a lot.

The grade of a lot of frozen okra covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Products Thereof, and Certain Other Processed Food Products (§§ 52.1 to 52.87).

SCORE SHEET

§ 52.1520 Score sheet for frozen okra.

Size and kind of container ....
Container marks or identification ....

Label			.....
Net Weight (ounces)			.....
Style (whole; cut)			.....
Variety			.....

Factors		Score points	
Color	30	(A)	27–30
		(B)	[1] 24–26
		(SStd.)	[1] 0–23
Defects	40	(A)	36–40
		(B)	[1] 32–35
		(SStd.)	[1] 0–31
Character	30	(A)	27–30
		(B)	[1] 24–26
		(SStd.)	[1] 0–23
Total score	100		

Flavor and odor			.....
Grade			.....

[1] Indicates limiting rule.

Subpart—United States Standards for Grades of Frozen Field Peas and Frozen Black-Eye Peas

SOURCE: 41 FR 16812, Apr. 22, 1976, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

§ 52.1661 Product description.

Frozen field peas and *frozen Black-eye peas*, called ''frozen peas'' in these standards, means the frozen product prepared from clean, sound, fresh, seed of proper maturity of the field pea plant (Vigna sinensis), by shelling, sorting, washing, blanching, and properly draining. The product is frozen and maintained at temperatures necessary for preservation. ''Frozen peas'' may contain succulent, unshelled pods (snaps) of the field pea plant as an optional ingredient used as a garnish.

§ 52.1662 Styles.

(a) *Frozen peas.*

(b) *Frozen peas with snaps.*

§ 52.1663 Types.

(a) *Single type.* Frozen peas that have distinct similarities of color and shape for the type are not considered ''mixed''. Single types include, but are not limited to, the following:

(1) *Black-eye peas* or other similar varietal types, such as ''Purple-hull peas'', that have a light-colored skin, a definite eye (contrasting color around the hilum), and are bean shaped;

(2) *Crowder peas* of various groups, such as ''Brown Crowder'', that are nearly round in shape and have blunt or square ends;

(3) *Cream peas* of various groups, including ''White Acre'', that have a solid cream-colored skin and are generally bean shaped; and

(4) *Field peas* means any varietal group or type of the field pea plant that has similar color and shape characteristics and includes ''Black-eye peas'', ''Crowder peas'', and ''Cream peas''.

(b) *Mixed type.* Frozen peas that are a mixture of two or more distinct single varietal groups or are not distinguishable as a single varietal group shall be considered ''mixed'' type.

§ 52.1664 Definitions of terms.

(a) *Absolute limit* (*AL*). The maximum number of defects; or the minimum number of ''color attributes'' permitted in a sample unit.

(b) *Acceptable quality level* (*AQL*). The maximum percent defective, or the maximum number of defects per hundred units; minimum percent ''color attributes'', or the minimum number of ''color attributes'' per hundred units, that, for purposes of acceptance sampling inspection, can be considered satisfactory as a process average.

(c) *Blemished.* ''Blemished'' means discolored, spotted, or damaged by any means to the extent that the appearance or eating quality is materially affected.

(d) *Broken.* ''Broken'' means the skin or portions of the skin, the cotyledon or portions of the cotyledon, have become separated from the unit. ''Broken'' is not applicable to ''snaps'' in the style of ''frozen peas with snaps''.

(e) *Character.* ''Character'' refers to the maturity and tenderness of the frozen peas, including snaps. Character is determined after cooking the product by the ''cooking procedure'' described in § 52.1670.

(1) *Good character.* The units are tender and in a reasonably young stage of maturity and are practically uniform in texture and tenderness.

(2) *Reasonably good character.* The units are reasonably tender and in a fairly young stage of maturity and may be variable in texture and tenderness; and the cotyledons may be mealy or firm but are not hard.

(f) *Defect.* Any nonconformance with a specified requirement. Defects are classified as ''minor'', ''major'', ''severe'', or ''critical''.

(g) *Deviant.* As applied to these standards, ''deviant'' means a sample unit that fails the requirements for the prerequisite factors of overall appearance, flavor and odor, freedom from grit, character, and freedom from broken peas; *Provided,* That such sample unit is not more than one grade below the intended or indicated grade.

(h) *Dissimilar varieties.* In single types only, peas that are of markedly different varietal colors and/or shapes. ''Dissimilar varieties'' is not applicable to snaps in the style of ''frozen peas with snaps''.

(i) *Harmless extraneous vegetable material.* (1) In the style of ''frozen peas'':

(i) *Class 1*—Hulls or pieces of unshelled pods (snaps), leaves, small tender stems, or other similar vegetable material; and

(ii) *Class 2*—Coarse, fibrous units of vegetable material which are harmless.

(2) In the style of ''frozen peas with snaps'':

(i) *Class 1*—Leaves, small tender stems, or other similar vegetable material, except ''snaps''; and

(ii) *Class 2*—Coarse, fibrous units of vegetable material which are harmless.

(j) *Flavor and odor*—(1) *Good flavor and odor.* The product, after cooking, has a good, characteristic normal flavor and odor and is free from objectionable flavors and objectionable odors of any kind.

(2) *Reasonably good flavor and odor.* The product, after cooking, may be lacking in good flavor but is free from objectionable flavors and objectionable odors of any kind.

(k) *Grit.* Sand, silt, or other earthy materials.

(l) *Sample.* The number of sample units to be used for inspection of a lot.

(m) *Sample unit.* The amount of product specified to be used for inspection. It may be:

(1) The entire contents of a container; or

(2) A portion of the contents of a container; or

(3) A combination of the contents of two or more containers; or

(4) A portion of unpacked product.

(n) *Shriveled.* A unit that is seriously wrinkled in appearance, excluding ''snaps''.

(o) *Snap.* A succulent, unshelled pod of the field pea or Black-eye pea plant.

(p) *Unit.* Any individual frozen pea; or any individual succulent, unshelled pod.

§ 52.1665 Sample unit size.

Compliance with requirements for all factors of quality is based on the following sample unit sizes:

(a) ''White Acre''—5 ounces (141.75 grams).

(b) All other types—10 ounces (283.5 grams).

§ 52.1666 Grades.

(a) ''U.S. Grade A'' is the quality of frozen peas that:

(1) Meets the following prerequisites (with deviants as specified in § 52.1673(a));

(i) Has a bright overall appearance;

(ii) Has a good flavor and odor;

(iii) Is practically free from grit;

(iv) Has a good character;

(v) Weight of broken peas does not exceed 0.25 ounce (7.1 grams) for ''White Acre'' peas and does not exceed 0.25 ounce (14.2 grams) for all other types; and

(2) Is within the limits for defects as classified in Table I and specified in Tables II and III.

(b) ''U.S. Grade B'' is the quality of frozen peas that:

(1) Meets the following prerequisites (with deviants as specified in § 52.1673(a));

(i) Has an overall appearance that may be dull but is not off-color;

(ii) Has a reasonably good flavor and odor;

(iii) Is practically free from grit;

(iv) Has a reasonably good character;

(v) Weight of broken peas does not exceed 0.5 ounce (14.2 grams) for ''White Acre'' peas and 1 ounce (28.35 grams) for all other types; and

(2) Is within the limits for defects as classified in Table I and specified in Tables II and III.

(c) ''Substandard'' is the quality of frozen peas that fail to meet the requirements for U.S. Grade B.

§ 52.1667 Factors of quality.

(a) The grade of a sample of frozen peas is based on compliance with the prerequisites specified in § 52.1666 and with limits for the following quality factors:

(1) Dissimilar varieties;

(2) Harmless extraneous vegetable material;

(3) Blemished units;

(4) Shriveled units; and

(5) Color attributes.

§ 52.1668 Classification of defects and grade compliance.

(a) Defects are classified as ''minor'', ''major'', ''severe'', or ''critical''. Each ''X'' mark in Table I represents ''one defect''.

(b) Classification of defects:

TABLE I

Quality factors	Defects	Classification			
		Minor	Major	Severe	Critical
Dissimilar varieties	Each unit[1]	X			
Harmless extraneous vegetable material	Class 1 (each unit)[2]			X	
	Class 2 (each unit)				X.
Blemished	Each unit		X		
Shriveled	.....do	X			

[1]Not applicable to ''mixed'' types.
[2]Not applicable to ''snaps'' in the style of ''frozen peas with snaps.''

(c) Grade compliance:

TABLE II

	Maximum defects permitted							
Absolute limit (AL)	67	32	5	2	100	49	9	4

Number of sample units	In the total sample							
	Grade A				Grade B			
	Total [1]	Major	Severe	Critical	Total [1]	Major	Severe	Critical
1	60	26	3	0	91	42	6	2
2	114	48	6	1	174	77	11	3
3	167	69	8	2	256	113	15	5
4	219	90	10	2	337	147	19	6
5	271	110	11	3	417	182	22	7
6	322	131	13	3	497	216	26	8
7	373	151	15	4	577	250	30	9
8	425	171	17	4	657	284	33	10
9	476	192	19	4	736	318	37	11
10	526	212	20	5	816	352	41	11
11	577	232	22	5	895	385	44	12
12	628	252	24	5	974	419	48	13
13	679	272	25	6	1,053	452	51	14
14	729	291	27	6	1,132	486	55	15
15	780	311	29	6	1,211	519	58	16
16	830	331	30	7	1,290	553	62	17
17	881	351	32	7	1,369	586	65	18
18	931	371	33	7	1,447	619	69	19
19	981	390	35	7	1,526	653	72	19
20	1,032	410	37	8	1,605	686	76	20
21	1,082	430	38	8	1,683	719	79	21
Acceptable quality level (AQL) [2]	7.0	2.70	0.20	0.03	11.0	4.60	0.45	0.10

[1] Total = Minor + major + severe + critical.
[2] Based on an average count of 1,400 units for "white acre" peas and 700 units for all other types per 10 oz. package.

§52.1669 Classification of color and grade compliance.

(a) *General.* The requirement for ''color attributes'' is applicable for Grade A classification only. ''Color attributes'' do not apply to units of black-eye peas, cream peas, or units of ''snaps'' in the style of ''frozen peas with snaps.''

(b) *Color attributes.* ''Color attributes'' are defined as follows:

(1) *Crowder peas.* Each unit with a color that is characteristic of very young peas.

(2) *Field peas* and *mixed types.* Each unit with a color that is characteristic of very young peas (''black-eye peas'' and ''cream peas'' are not considered.)

(c) *Compliance.* For the purposes of determining compliance with the requirements of Grade A color, the applicable varietal type shall meet the acceptance numbers for color attributes in Table III.

TABLE III.—COLOR ATTRIBUTES

Absolute limit (AL)	Minimum number permitted	
Number of sample units	73	119
	Field peas, and mixed types	Crowder peas
1	84	133
2	175	276
3	268	421
4	362	566
5	456	712
6	551	859
7	646	1006
8	741	1153
9	837	1148
10	932	1596
11	1028	1596
12	1124	1744
13	1220	1892
14	1315	2040
15	1411	2188
16	1508	2336
17	1604	2485
18	1700	2633
19	1796	2782
20	1892	2930
21	1989	3079
Acceptable quality Level (AQL)[1]	14.0	21.50

[1] Based on an average count of 1400 units for ''White Acre'' peas and 700 units for all other types per 10 ounce package.

[41 FR 16812, Apr. 22, 1976. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981, and amended at 60 FR 62710, Dec. 7, 1995; 61 FR 48066, Sept. 12, 1996]

§52.1670 Determining flavor, odor, presence of grit, maturity, tenderness, and texture.

(a) *General.* The cooking procedure is used to determine compliance with the requirements for flavor, odor, presence of grit, maturity, tenderness, and texture.

(b) *Cooking procedure.* Place 10 ounces (283.5 grams) of thawed product in a 2 quart (1.9 liter) sauce pan containing 400 milliliters of tap water (without the addition of salt) that has been brought to a boil. Continue to heat rapidly until the water begins to boil again. Cover the pan and boil for 40 minutes, reducing the heat to maintain a constant boil. Immediately after cooking, pour the product on to a flat receptacle and spread out to cool. The product should be evaluated for flavor, odor, presence of grit, maturity, tenderness, and texture while warm.

§52.1671 Lot acceptance for style.

In the style of ''frozen peas with snaps,'' the number of sample units that contain less than 3 snaps or more than 10 percent, by weight, of snaps shall not exceed the acceptance number specified in the sampling plans in the ''Regulations Governing Inspection of Processed Fruits and Vegetables and Related Products'' (§52.38).

§52.1672 Sample size.

(a) *General.* The sample size to determine compliance with requirements for prerequisites specified in §52.1666 for other quality factors, shall be as specified in the sampling plans and procedures in the ''Regulations Governing Inspection of Processed Fruits and Vegetables and Related Products'' (§52.38) for Lot Inspection or on-line Inspection, as applicable.

(b) *Deviants.* The acceptance numbers for deviants specified in the sampling plans cited in paragraph (a) of this section apply only to the prerequisite factors specified for the grade in §52.1666. They do not apply to the quality factors covered by the sampling plans in §52.1668 and §52.1669.

§52.1673 Lot acceptance for quality.

A lot of frozen peas is considered as meeting the requirements for quality if:

(a) The number of deviants for the prerequisites specified for the applicable grade in § 52.1666 does not exceed the acceptance number specified in the sampling plans in the ''Regulations Governing Inspection of Proc- essed Fruits and Vegetables and Related Products'' (§ 52.38).

(b) The values permitted and the AL values for the applicable defect classifications specified in Tables II and III are not exceeded.

§ 52.1674 Defect tally.

DEFECT TALLY FOR FROZEN FIELD PEAS AND FROZEN BLACK-EYE PEAS

No., size, and kind of container .....
Label .....
Container mark .....
Net weight .....
Sample unit No. .....
Prerequisite grade .....
Reason downgraded .....

Defect	Minor	Major	Severe	Critical
Dissimilar varieties				
Blemished				
Shriveled				
Harmless extraneous vegetable material				
Total (each class)				
Cumulative total (each class)				
Total (all classes)				
Cumulative total (all classes)				
Color				
Total (sample unit)				
Cumulative total (sample)				

Subpart—United States Standards for Grades of Processed Raisins[1]

SOURCE: 41 FR 34751, Aug. 17, 1976, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

§ 52.1841 Product description.

Processed Raisins are dried grapes of the Vinifera varieties, such as Thompson Seedless (Sultanina), Muscat of Alexandria, Muscatel Gordo Blanco, Sultana, Black Corinth or White Corinth. The processed raisins are prepared from clean, sound, dried grapes; are properly stemmed and capstemmed except for cluster or uncapstemmed raisins; are properly seeded in seeded styles; are sorted or cleaned, or both; and except for cluster or uncapstemmed raisins, are washed in water to assure a wholesome product.

§ 52.1842 Product description of Layer or (Cluster) raisins with seeds.

Raisins with Seeds that are referred to as *Layer or Cluster raisins* means that the raisins have not been detached from the main bunch.

§ 52.1843 Summary of types (varieties) of processed raisins.

(a) Type I—Seedless Raisins.

(1) Natural.

(2) Dipped, Vine-dried, or similarly processed raisins.

(b) Type II—Golden Seedless Raisins.

(c) Type III—Raisins with Seeds.

(1) Natural.

(i) Seeded (seeds removed).

[1] Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable State laws and Regulations.

(ii) Unseeded-capstemmed (loose).

(iii) Unseeded-uncapstemmed (loose).

(iv) Layer (or Cluster).

(2) Dipped, Vine-dried, or other similarly processed raisins.

(i) Seeded (seeds removed).

(ii) Unseeded-capstemmed (loose).

(iii) Unseeded-uncapstemmed (loose).

(d) Type IV—Sultana Raisins.

(e) Type V—Zante Currant Raisins.

(i) Unseeded.

(ii) Seeded.

(f) Type VI—Mixed Types or Varieties of Raisins. A mixture of two or more different types (varieties) of raisins including sub-types outlined in this section but other than: (1) Mixtures containing Layer or Cluster Raisins with seeds; (2) Mixtures containing Unseeded-capstemmed and Unseeded-uncapstemmed Raisins with Seeds; and (3) mixture of Seeded and Unseeded Raisins with Seeds.

§ 52.1844 Definition of terms.

(a) *Capstems* means small woody stems exceeding ⅛-inch in length which attach the raisins to the branches of the bunch.

(b) A *piece of stem* means a portion of the branch or main stem.

(c) *Seeds* refers to whole, fully developed seeds which have not been removed during the processing of seeded raisins with seeds.

(d) *Damaged raisins* means raisins affected by sunburn, scars, insect injury, mechanical injury, or other similar means which seriously affect the appearance, edibility, keeping quality, or shipping quality of the raisins. In seeded Raisins with Seeds, mechanical injury resulting from normal seeding operations is not considered damage.

(e) *Sugared* means either external or internal sugar crystals are present and the accumulation of such crystallized fruit sugars in the flesh or on the surface of the raisins is readily apparent.

(f) *Grit, sand, or silt* means any particle or earthy material.

(g) *Moisture* means the percentage by weight of the processed raisins, exclusive of branch and heavy stem material, that is moisture when determined by the ''Dried Fruit Moisture Tester Method'' or in accordance with other methods that give equivalent results.

(h) *Slightly discolored* means a raisin affected by a brown to dark brown discolored area around the capstem end of the raisin that is less than the area of a circle ⅛-inch in diameter.

(i) *Discolored* means a raisin affected by a brown to dark brown discolored area around the capstem end of the raisin that equals or exceeds the area of a circle ⅛-inch in diameter; *Provided*, That the overall appearance, keeping quality, and edibility of the product are not seriously affected.

(j) *Well-matured* means raisins that are full-fleshed, may have fine wrinkles and are rounded in appearance.

(k) *Reasonably well-matured* means raisins that are reasonably full-fleshed and may have shallow wrinkles with thick edged ridges.

(l) *Fairly well-matured* means raisins that are thin-fleshed and angular in appearance.

(m) *Substandard development* means raisins that are practically lacking in flesh.

(n) *Undeveloped* refers to extremely light berries that are lacking in sugary tissue indicating incomplete development; are reddish in color; are completely shriveled; have fine wrinkles on smaller units and moderately deep wrinkles on slightly larger units; and are commonly referred to as ''worthless.''

TYPE I—SEEDLESS RAISINS

§ 52.1845 Sizes of seedless raisins.

The size designations and measurement requirements for the respective sizes are:

(a) *Select* size raisins means that no more than 60 percent, by weight, of all the raisins will pass through round perforations 22/64-inch in diameter, but not more than 10 percent, by weight, of all the raisins may pass through round perforations 20/64-inch in diameter.

(b) *Small* or *midget* size raisins means that 95 percent, by weight, of all the raisins will pass through round perforations 24/64-inch in diameter, and not less than 70 percent, by weight, of all raisins will pass through round perforations 22/64-inch in diameter.

(c) *Mixed* size raisins means a mixture which does not meet either the requirements for ''select'' size or for ''small'' or ''midget'' size.

§ 52.1846 Grades of seedless raisins.

(a) ''U.S. Grade A'' is the quality of seedless raisins that have similar varietal characteristics; that have a good typical color; that have a good characteristic flavor; that show development characteristics of raisins prepared from well-matured grapes with not less than 80 percent, by weight, of raisins that are well-matured or reasonably well-matured; that contain not more than 18 percent, by weight, of moisture for all varieties of seedless raisins except the Monukka variety, which may contain not more than 19 percent, by weight, of moisture; and that meet the additional requirements outlined in Table I of this subpart.

(b) ''U.S. Grade B'' is the quality of seedless raisins that have similar varietal characteristics; that have a reasonably good typical color; that have a good characteristic flavor; that show development characteristics of raisins prepared from reasonably well-matured grapes with not less than 70 percent, by weight, of raisins that are well-matured or reasonably well-matured; that contain not more than 18 percent, by weight, of moisture for all varieties of seedless raisins except the Monukka variety, which may contain not more than 19 percent, by weight, of moisture; and that meet the additional requirements outlined in Table I of this subpart.

(c) ''U.S. Grade C'' is the quality of seedless raisins that have similar varietal characteristics; that have a fairly good typical color; that have a fairly good flavor; that show development characteristics of raisins prepared from fairly well-matured grapes with not less than 55 percent, by weight, of raisins that are well-matured or reasonably well-matured; that contain not more than 18 percent, by weight, of moisture for all varieties of seedless raisins except the Monukka variety, which may contain not more than 19 percent, by weight, of moisture; and that meet the additional requirements outlined in Table I of this subpart.

(d) ''Substandard'' is the quality of seedless raisins that fail to meet the requirements of U.S. grade C.

[43 FR 51754, Nov. 7, 1978. Redesignated at 46 FR 63203, Dec. 31, 1981]

TABLE I—ALLOWANCES FOR DEFECTS IN TYPE I, SEEDLESS RAISINS AND TYPE II, GOLDEN SEEDLESS RAISINS

Defects	U.S. Grade A	U.S. Grade B	U.S. Grade C
	Maximum count (per 96 ounces)		
Pieces of stem	1	2	4
	Maximum count (per 16 ounces)		
Capstems	15	25	35
	Maximum (percent by weight)		
Sugared	5	10	15
Discolored, damaged or moldy raisins	4	6	9
Provided these limits are not exceeded:			
Damaged	2	3	5
Moldy	2	3	4
	Total		
Substandard development and undeveloped:			
Selected size	1	1½	2
Mixed size	1	2	3
Small (Midget) size	2	3	5

TABLE I—ALLOWANCES FOR DEFECTS IN TYPE I, SEEDLESS RAISINS AND TYPE II, GOLDEN SEEDLESS RAISINS—Continued

Defects	U.S. Grade A	U.S. Grade B	U.S. Grade C
	Appearance or edibility of product		
Slightly discolored or damaged by fermentation or any other defect not described above.	May not be affected	May not be more than slightly affected.	May not be materially affected.
Grit, sand, or silt	None of any consequence may be present that affects the appearance or edibility of the product.		Not more than a trace may be present that affects the appearance or edibility of the product.

TYPE II—GOLDEN SEEDLESS RAISINS

§52.1847 Colors of golden seedless raisins.

The color of Golden Seedless Raisins is not a factor of quality for the purpose of these grades. The color requirements applicable to the respective color designations are as follows:

(a) ''Well colored'' means that the raisins are practically uniform in color and may range from yellow or golden to light amber color with a predominating yellow or golden color and that not more than ½ of 1 percent, by weight, of all the raisins may be definitely dark berries.

(b) ''Reasonably well colored'' means that the raisins are reasonably uniform in color and may range from yellow or golden or greenish yellow to light amber wherein the predominating color may be greenish yellow or light amber and that not more than 3 percent, by weight, of all the raisins may be definitely dark berries.

(c) ''Fairly well colored'' means that the raisins are fairly uniform in color and may range from yellow or greenish yellow to amber or light greenish amber and that not more than 6 percent, by weight, of all the raisins may be definitely dark berries.

(d) ''Colored'' means that the raisins may be variable in color and may range from yellowish green to dark amber or dark greenish amber; that not more than 20 percent, by weight, of all the raisins may be definitely dark berries.

(e) ''Definitely dark berries'' means raisins which are definitely darker than dark amber and characteristic of naturally ''raisined'' grapes.

§52.1848 Sizes of golden seedless raisins.

The size designations and measurement requirements for the respective sizes of Golden Seedless Raisins are the same as for Seedless Raisins (See §52.1845).

§52.1849 Grades of golden seedless raisins.

Except for color, the grades of Golden Seedless Raisins are the same as for Seedless Raisins (See §52.1846 and Table I).

TYPE III—RAISINS WITH SEEDS

§52.1850 Sizes of raisins with seeds—except layer or cluster.

The sizes of Raisins with Seeds—except for Layer or Cluster Raisins with Seeds, are not incorporated in the grades of the finished product since size, as such, is not a factor of quality for the purposes of these grades. The common size designations and measurement requirements applicable thereto include, but are not limited to, the following:

(a) *Seeded.* (1) *Select* size raisins means that not more than 70 percent, by weight, of the raisins will pass through round perforations 34/64-inch in diameter; and not more than 5 percent, by weight, of the raisins will pass through round perforations 22/64-inch in diameter.

(2) *Small* or *midget* size raisins means that all of the raisins will pass through round perforations 34/64-inch in diameter and not less than 90 percent, by weight, of all the raisins will pass

through round perforations 22/64-inch in diameter.

(3) *Mixed* size raisins means a mixture which does not meet either the requirements for ''select'' size or for ''small'' (or ''midget'') size.

(b) *Unseeded.* (1) *4 Crown* means raisins that will not pass through round perforations 42/64-inch in diameter.

(2) *3 Crown* means raisins that will pass through round perforations 42/64-inch in diameter but will not pass through round perforations 34/64-inch in diameter.

(3) *2 Crown* means raisins that will pass through round perforations 34/64-inch in diameter but will not pass through round perforations 24/64-inch in diameter.

(4) *1 Crown* means raisins that will pass through round perforations 24/64-inch in diameter.

§ 52.1851 Sizes of raisins with seeds—layer or cluster.

The size of Layer or Cluster Raisins with Seeds is incorporated in the grades of the finished product. The size designation and measurement as applicable to layer or cluster raisins with seeds are:

(a) *3 Crown size or larger.* ''3 Crown size or larger'' in Layer or Cluster Raisins with Seeds means that the raisins, exclusive of stems and branches, are such a size that they will not pass through round perforations 34/64-inch in diameter.

§ 52.1852 Grades of raisins with seeds—except layer or cluster.

(a) ''U.S. Grade A'' is the quality of Raisins with Seeds that have similar varietal characteristics; that have a good typical color with not more than 10 percent, by weight, that may be dark reddish-brown berries; that have a good characteristic flavor; that show development characteristics of raisins prepared from well-matured grapes; with not less than 80 percent, by weight, of raisins that are well-matured or reasonably well-matured; that contain not more than 18 percent, by weight, of moisture, except that any seeded raisins may contain not more than 19 percent, by weight, of moisture; and meet the additional requirements as outlined in Table II of this subpart.

(b) ''U.S. Grade B'' is the quality of Raisins with Seeds that have similar varietal characteristics; that have a reasonably good typical color with not more than 15 percent, by weight, that may be dark reddish-brown berries; that have a good characteristic flavor; that show development characteristics of raisins prepared from reasonably well-matured grapes; with not less than 70 percent, by weight, of raisins that are well-matured or reasonably well matured; that contain not more than 18 percent, by weight, of moisture, except that any seeded raisins may contain not more than 19 percent, by weight, of moisture; and meet the additional requirements as outlined in Table II of this subpart.

(c) ''U.S. Grade C'' is the quality of Raisins with Seeds that have similar varietal characteristics; that have a fairly good typical color with not more than 20 percent, by weight, that may be dark reddish-brown berries; that have a fairly good flavor; that show development characteristics of raisins prepared from fairly well-matured grapes; that contain not more than 18 percent, by weight, of moisture, except that any seeded raisins may contain not more than 19 percent, by weight, of moisture; and meet the additional requirements as outlined in Table II of this subpart.

(d) ''Substandard'' is the quality of Raisins with Seeds that fail to meet the requirements of U.S. Grade C.

TABLE II—ALLOWANCES FOR DEFECTS IN RAISINS WITH SEEDS—EXCEPT LAYER OR CLUSTER

Defects	U.S. Grade A	U.S. Grade B	U.S. Grade C
	Maximum count (per 32 ounces)		
Pieces of stem	7	2	3

TABLE II—ALLOWANCES FOR DEFECTS IN RAISINS WITH SEEDS—EXCEPT LAYER OR CLUSTER—Continued

Defects	U.S. Grade A	U.S. Grade B	U.S. Grade C
	Maximum count (per 16 ounces)		
Capstems in other than uncapstemmed types	10	15	20
Seeds in seeded types	12	15	20
Loose capstems in uncapstemmed types	20	20	20
	Maximum (percent by weight)		
Sugared	5	10	15
Discolored, damaged, or moldy	5	7	9
Provided these limits are not exceeded:			
Damaged	3	4	5
Moldy	2	3	4
Substandard development and undeveloped	2	5	8
	Appearance or edibility of product		
Slightly discolored or damaged by fermentation or any other defect not described above.	May not be affected	May not be more than slightly affected.	May not be more than materially affected.
Grit, sand, or silt	None of any consequence may be present that affects the appearance or edibility of the product.		Not more than a trace may be present that affects the appearance or edibility of the product.

§ 52.1853 Grades of raisins with seeds—layer or cluster.

(a) ''U.S. Grade A'' is the quality of Layer or Cluster Raisins with Seeds that have similar varietal characteristics; that have a good typical color; that have a good characteristic flavor; that are uniformly cured and show development characteristics of raisins prepared from well-matured grapes; that contain not more than 23 percent, by weight, of moisture; that not less than 30 percent, by weight, of the raisins, exclusive of stems and branches, are 3-Crown size or larger; and that meet the following additional requirements as outlined in Table III of this subpart.

(b) ''U.S. Grade B'' is the quality of Layer or Cluster Raisins with Seeds that have similar varietal characteristics that have a reasonably good typical color; that have a good characteristic flavor; that are uniformly cured and show development characteristics of raisins prepared from reasonably well-matured grapes; that contain not more than 23 percent, by weight, of the moisture, that not less than 30 percent, by weight, of the raisins exclusive of stems and branches, are 3-Crown size or larger; and that meet the additional requirements outlined in Table III of this subpart.

(c) ''Substandard'' is the quality of Layer or Cluster Raisins with Seeds that fail to meet the requirements of U.S. Grade B.

TABLE III—ALLOWANCE FOR DEFECTS IN LAYER OR CLUSTER RAISINS WITH SEEDS

Defects	U.S. Grade A	U.S. Grade B
	Maximum (percent by weight)	
Sugared	5	10
Discolored, damaged, or moldy	5	7
Provided these limits are not exceeded:		
Damaged	3	4
Moldy	2	3
Substandard development and undeveloped	2	5
Shattered (or loose) individual berries and small clusters of 2 or 3 berries each.	Practically free	Reasonably free.
	Appearance or edibility of product	
Slightly discolored or damaged by fermentation or any other defect not described above.	May not be affected	May not be more than slightly affected.
Grit, sand, or silt	None of any consequence may be present that affects the appearance or edibility of the product.	

TYPE IV—SULTANA RAISINS

§ 52.1854 Sizes of Sultana raisins.

Size designations are not applicable to Sultana Raisins.

§ 52.1855 Grades of Sultana raisins.

(a) ''U.S. Grade A'' is the quality of Sultana Raisins that have similar varietal characteristics; that have a good typical color; that have a good characteristic flavor; that show development characteristics of raisins prepared from well-matured grapes; with not less than 80 percent, by weight, of raisins that are well-matured or reasonably well-matured; and that contain not more than 18 percent, by weight, of moisture, and that meet the additional requirements outlined in Table IV of this subpart.

(b) ''U.S. Grade B'' is the quality of Sultana Raisins that have similar varietal characteristics; that have a reasonably good typical color; that have a good characteristic flavor; that show development characteristics of raisins prepared from reasonably well-matured grapes; with not less than 70 percent, by weight, of raisins that are well-matured or reasonably well-matured; and that contain not more than 18 percent, by weight, of moisture, and that meet the additional requirements as outlined in Table IV of this subpart.

TABLE IV—ALLOWANCES FOR DEFECTS IN SULTANA RAISINS

Defects	U.S. Grade A	U.S. Grade B	U.S. Grade C
	Maximum count (per 32 ounces)		
Pieces of stem	1	2	3
	Maximum count (per 16 ounces)		
Capstems	25	45	65
	Maximum (percent by weight)		
Sugared	5	10	15
Discolored, damaged, or moldy	4	6	9
Provided these limits are not exceeded:			
Damaged	2	3	5

TABLE IV—ALLOWANCES FOR DEFECTS IN SULTANA RAISINS—Continued

Defects	U.S. Grade A	U.S. Grade B	U.S. Grade C
Moldy	2	3	4
Substandard development and undeveloped	2	5	8
	Appearance or edibility of product		
Slightly discolored or damaged by fermentation or any other defect not described above.	May not be affected	May not be more than slightly affected.	May not be more than materially affected.
Grit, sand, or silt	None of any consequence may be present that affects the appearance or edibility of the product.		Not more than a trace may be present that affects the appearance or edibility of the product.

(c) ''U.S. Grade C'' is the quality of Sultana Raisins that have similar varietal characteristics; that have a fairly good typical color; that have a fairly good flavor; that show development characteristics of raisins prepared from fairly well-matured grapes; that contain not more than 18 percent, by weight, of moisture; and that meet the additional requirements as outlined in Table IV of this subpart.

(d) ''Substandard'' is the quality of Sultana Raisins that fail to meet the requirements of U.S. Grade C.

TYPE V—ZANTE CURRANT RAISINS

§ 52.1856 Sizes of zante currant raisins.

Size designations are not applicable to Zante Currant Raisins.

§ 52.1857 Grades of zante currant raisins.

(a) ''U.S. Grade A'' is the quality of Zante Currant Raisins that have similar varietal characteristics; that have a good typical color; that have a good characteristic flavor; that show development characteristics of raisins prepared from well-matured grapes; that have not less than 75 percent, by weight, of raisins that are well-matured or reasonably well matured; that contain not more than 20 percent, by weight, of moisture; and meet the additional requirements as outlined in Table V of this subpart.

TABLE V—Allowances for Defects in Zante Currant Raisins

Defects	Maximum count	
	U.S. Grade A	U.S. Grade B
Pieces of stem	1 per 24 ounces	1 per 16 ounces.
Seeds (in Seeded style)	12 per 16 ounces	15 per 16 ounces.
	Maximum (percent by weight)	
Capstems — Zantes with capstems and loose capstems (include one Zante with each loose capstem).	1½	2
Sugared	5	10
Discolored, damaged, or moldy	5	7
Provided these limits are not exceeded:		
Damaged	2	3
Moldy	3	4
Substandard Development and Undeveloped	2	5

TABLE V—Allowances for Defects in Zante Currant Raisins—Continued

Defects	Maximum count	
	U.S. Grade A	U.S. Grade B
	Appearance or edibility of product	
Slightly discolored or damaged by fermentation or any other defect not described above.	May not be affected	May not be more than slightly affected.
Grit, sand, or silt	None of any consequence may be present that affects the appearance or edibility of the product.	

(b) ''U.S. Grade B'' is the quality of Zante Currant Raisins that have similar varietal characteristics; that have a reasonably good typical color; that have a good characteristic flavor; that have development characteristics of raisins prepared from reasonably well-matured and/or fairly well matured grapes; that contain not more than 20 percent, by weight, of moisture; and meet the additional requirements as outlined in Table V of this subpart.

(c) ''Substandard'' is the quality of Zante Currant Raisins that fail to meet the requirements of U.S. Grade B.

TYPE VI—MIXED TYPES OF RAISINS

§ 52.1858 Grades of mixed types or varieties of raisins.

The grade of a lot of mixed types of processed raisins shall be the lower (or lowest) grade of any varietal type in the mixture based on the respective requirements for each type, except for moisture, in accordance with this subpart. Mixed types of processed raisins of U.S. Grade A, U.S. Grade B, or U.S. Grade C may contain not more than 18 percent, by weight, of moisture. Mixed types of processed raisins that as a mixture exceed 18 percent, by weight, of moisture are ''Substandard.''

Subpart—United States Standards for Grades of Frozen Green Beans and Frozen Wax Beans

SOURCE: 61 FR 37665, July 19, 1996, unless otherwise noted.

§ 52.2321 Product description.

Frozen green beans and *frozen wax beans,* hereinafter called *frozen beans,* means the frozen product prepared from the clean, sound, succulent pods of the bean plant. The pods are stemmed, washed, blanched, sorted, and properly drained. The product is frozen in accordance with good commercial practice and maintained at temperatures necessary for the preservation of the product.

§ 52.2322 Styles.

(a) *Whole* means frozen beans consisting of whole pods, which after removal of either or both ends, are not less than 44 mm (1.75 in) in length.

(b) *Cut or cuts* means frozen beans consisting of pods that are cut transversely into pieces less than 70 mm (2.75 in) but not less than 19 mm (0.75 in) in length.

(c) *Short cut or short cuts* means frozen beans consisting of pieces of pods of which 75 percent or more are less than 19 mm (0.75 in) in length and not more than 1 percent are more than 32 mm (1.25 in) in length.

(d) *Mixed* means a mixture of two or more of the following styles of frozen beans: whole, cut, or short cut.

(e) *Sliced lengthwise, or French style* means frozen green beans consisting of pods that are sliced lengthwise.

§ 52.2323 Types.

The type of frozen beans is not incorporated in the grades of finished product, since it is not a factor of quality. The types of frozen beans are described as *round type* and *Romano or Italian type.*

(a) *Round type* means frozen beans having a width not greater than 1½ times the thickness of the beans.

(b) *Romano or Italian type* means frozen beans having a width greater than 1½ times the thickness of the beans.

§52.2324 Kinds of pack.

The kind of pack of frozen beans is not incorporated in the grades of finished product, since it is not a factor of quality. The kinds of pack of frozen beans are described as *regular process, extended blanch process,* and *special pack.*

(a) *Regular process* means the frozen beans are processed in such a manner that the brightness is not affected by the process.

(b) *Extended blanch process* means the frozen beans are intentionally processed in such a manner that the brightness is affected by the process.

(c) *Special pack* means the frozen bean pack intentionally contains beans of two or more varietal characteristics (such as a mixture of green and wax beans).

§52.2325 Definitions of terms.

(a) *Acceptable Quality Level (AQL)* means the maximum percent of defective units or the maximum number of defects per hundred units of product that, for the purpose of acceptance sampling, can be considered satisfactory as a process average.

(b) Blemish—(1) *Minor blemish* means any unit which is affected by scars, pathological injury, insect injury or other means in which the aggregate area affected exceeds the area of a circle 3 mm (0.125 in) in diameter or the appearance or eating quality of the unit is slightly affected.

(2) *Major blemish* means any unit which is affected or damaged by discoloration or any other means to the extent that the appearance or eating quality of the unit is more than slightly affected.

(3) *Total blemish* means the total of the major and minor blemishes.

(c) *Brightness* means the extent that the overall appearance of the sample unit as a mass is affected by dullness. (Applies to *regular process* only).

(1) Grade A: Not affected.

(2) Grade B: Slightly affected.

(3) Grade C: Materially affected.

(4) Substandard: Seriously affected.

(d) *Character—(1) Round type—Green Beans*—(i) *Good character* means the pods are full fleshed; after cooking, the pods are tender and the seeds are not mealy.

(ii) *Reasonably good character* means the pods are reasonably fleshy; after cooking, the pods are tender and the seeds are not mealy.

(iii) *Fairly good character* means the pods have not entirely lost their fleshy structure; after cooking, the pods are fairly tender and the seeds may be slightly mealy.

(iv) *Poor character* means the beans fail the requirements for *fairly good character.*

(2) *Round type—Wax Beans*—(i) *Good character* means the pods are full fleshed and may show slight breakdown of the flesh between seed cavities; after cooking, the pods are tender and the seeds are not mealy.

(ii) *Reasonably good character* means the pods are reasonably fleshy and may show substantial breakdown of the flesh between the seed cavities; after cooking, the pods are tender and the seeds are not mealy.

(iii) *Fairly good character* means the pods may show total breakdown of the flesh between the seed cavities with no definite seed pocket, but still retain flesh on the inside pod wall; after cooking, the pods are fairly tender and the seeds may be slightly mealy.

(iv) *Poor character* means the beans fail the requirements for *fairly good character.*

(3) *Romano or Italian type*—(i) *Good character* means the pods have a full inner membrane, typical of the variety and are tender after cooking.

(ii) *Reasonably good character* means the pods have a reasonably well developed inner membrane and are reasonably tender after cooking.

(iii) *Fairly good character* means the pods may lack an inner membrane; and are fairly tender after cooking.

(iv) *Poor character* means the beans fail the requirements for *fairly good character.*

(e) *Color defective* means a unit that varies markedly from the color that is normally expected for the variety and grade.

(f) *Defect* means any nonconformance of a unit of product from a specified requirement of a single quality characteristic.

(g) *Extraneous vegetable material (EVM)* means harmless vegetable material (other than the bean pods) including, but not limited to, stalk, vine material, [vine material with stem(s) attached], leaves of the bean plant, and leaves or portions of other harmless plants.

(h) *Fiber*—(1) *Edible fiber* means fiber developed in the wall of the bean pod that, after cooking, is noticeable upon chewing, but can be consumed with the rest of the bean material without objection.

(2) *Inedible fiber* means fiber developed in the wall of the bean pod that, after cooking, is objectionable upon chewing and tends to separate from the rest of the bean material.

(i) *Flavor and odor. Good flavor and odor* means the product, after cooking, has a characteristic green bean or wax bean flavor and odor typical of the varietal type and is free from objectionable flavors and odors.

(j) *Mechanical damage* means a unit, in all styles except French, that is broken or split into two parts (equals 1 defect), is crushed, or is damaged by mechanical means to such an extent that the appearance is seriously affected; and for whole and cut styles has very ragged edges that are greater than 8 mm (5/16 in).

(k) *Short piece* means a unit in cut style, that is less than 13 mm (0.50 in) in length, and a unit in whole style that is less than 44 mm (1.75 in) in length, measured along the longest dimension parallel to the bean suture line.

(l) *Single sample unit* means the amount of product specified (500 grams for French style and 400 units for all other styles) to be used for unofficial inspection. It may be:

(1) The entire contents of a container;

(2) A portion of the contents of a container; or

(3) A combination of the contents of two or more containers.

(m) *Sloughing* means the separation of the outer surface layer of tissue from the pod.

(n) *Small pieces and odd cuts*, in French style only, mean pieces of pod less than 19 mm (0.75 in) in length or pieces of pod not conforming to the normal appearance of a sliced lengthwise bean unit.

(o) *Stem* means any part or portion (loose or attached) of the hard or tough fibrous material that attaches the bean pod to the vine.

(p) *Tolerance* means the percentage of defective units allowed for each quality factor for a specified sample size.

(q) *Unit* means a bean pod or any individual portion thereof.

§ 52.2326 Grades.

(a) *U.S. Grade A* is the quality of frozen beans that:

(1) Meets the following prerequisites in which the beans:

(i) Have similar varietal characteristics (except special packs);

(ii) Have a good flavor and odor;

(iii)Have a good overall brightness that is not affected by dullness (regular process only); and

(iv) Are not materially affected by sloughing.

(2) Is within the limits for defects as specified in Section 52.2328, as applicable for the style.

(b) *U.S. Grade B* is the quality of frozen beans that:

(1) Meets the following prerequisites in which the beans:

(i) Have similar varietal characteristics (except special packs);

(ii) Have a good flavor and odor;

(iii) Have a reasonably good overall brightness (regular process only); and

(iv) Are not materially affected by sloughing.

(2) Is within the limits for defects as specified in Section 52.2328, as applicable for the style.

(c) *U.S. Grade C* is the quality of frozen beans that:

(1) Meets the following prerequisites in which the beans:

(i) Have similar varietal characteristics (except special packs);

(ii) Have a good flavor and odor;

(iii) Have a fairly good overall brightness (regular process only); and

(iv) Are not seriously affected by sloughing.

(2) Is within the limits for defects as specified in Section 52.2328, as applicable for the style.

(d) *Substandard* is the quality of frozen beans that fail the requirements of U.S. Grade C.

§ 52.2327 Factors of quality.

The grade of frozen beans is based on requirements for the following quality factors:

(a) *Prerequisite quality factors.* (1) Varietal characteristics (except special packs);

(2) Flavor and odor;

(3) Brightness (regular process only); and

(4) Sloughing.

(b) *Classified quality factors.* (1) Extraneous vegetable material (EVM);

(2) Stems;

(3) Major blemishes;

(4) Total blemishes;

(5) Mechanical damage;

(6) Short pieces (Cut, Whole Style);

(7) Small pieces and odd cuts (French Style);

(8) Color defectives;

(9) Character;

(10) Inedible fiber; and

(11) Edible fiber.

§ 52.2328 Allowances for defects.

TABLE I—PREREQUISITE FACTORS FOR FROZEN GREEN BEANS AND WAX BEANS [1]

Factors	Grade A	Grade B	Grade C
Varietal characteristics	Similar	Similar	Similar.
Flavor and odor	Good	Good	Good.
Brightness	Good	Reasonably good	Fairly good.
Sloughing	Not materially affected	Not materially affected	Not seriously affected.

[1] Determined container-by-container.

TABLE II.—ACCEPTANCE NUMBERS FOR WHOLE, AND CUT STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE A)

Sample Units × Sample Unit Size			1×400	1.5×400	3×400	6×400	13×400	21×400	29×400
Units of Product			[1] 400	[2] 600	1200	2400	5200	8400	11600
TOL	AQL [3]	Quality factors	Acceptance numbers						
0.25	0.162	Extraneous Vegetable Material	2	2	4	7	13	19	26
0.75	0.58	Stems	5	6	11	20	39	60	81
1.25	1.02	Major Blemishes	7	10	18	33	65	101	136
3.75	3.30	Total Blemishes (Major + Minor)	19	27	50	94	193	304	415
3.00	2.60	Mechanical Damage	16	22	40	75	154	242	330
20.00	19.10	Short Pieces, Whole Style	89	130	251	490	1040	1664	2285
8.50	7.90	Short Pieces, Cut Style	41	59	111	212	444	706	966
1.75	1.48	Edible Fiber	10	14	25	45	91	142	193
0.10	0.05	Inedible Fiber	1	1	2	3	5	7	10
5.50	5.00	Color Defectives	27	39	73	138	286	454	620
10.75	10.10	Character—"B"	50	72	138	266	561	894	1225
1.25	1.02	Character—"C"	7	10	18	33	65	101	136
0.10	0.05	Character—"SStd"	1	1	2	3	5	7	10

[1] For unofficial samples. [2] For use with small container sizes only. [3] AQL calculated from tolerance (TOL) at 5200.

TABLE IIA.—ACCEPTANCE NUMBERS FOR WHOLE, AND CUT STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE B)

Sample Units × Sample Unit Size			1×400	1.5×400	3×400	6×400	13×400	21×400	29×400
Units of Product			[1] 400	[2] 600	1200	2400	5200	8400	11600
TOL	AQL [3]	Quality factors	Acceptance numbers						
.50	0.366	Extraneous Vegetable Material	3	4	8	13	26	40	53
1.50	1.25	Stems	8	12	21	39	78	122	165
2.50	2.17	Major Blemishes	13	19	34	64	130	204	278
6.75	6.20	Total Blemishes (Major + Minor)	33	47	88	169	352	559	763
6.00	5.50	Mechanical Damage	30	42	79	151	314	498	680
N/A	N/A	Short Pieces, Whole Style	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12.50	11.80	Short Pieces, Cut Style	58	84	160	309	652	1040	1426
4.50	4.00	Edible Fiber	22	32	59	112	232	366	500
1.50	1.25	Inedible Fiber	8	12	21	39	78	122	165
10.75	10.10	Color Defectives	50	72	138	266	561	894	1225
N/A	N/A	Character— "B"	N/A	N/A	N/A	N/A	N/A	N/A	N/A

10.75	10.10	Character— "C"	50	72	138	266	561	894	1225
1.25	1.02	Character— "SStd"	7	10	18	33	65	101	136

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 5200.

TABLE IIB.—ACCEPTANCE NUMBERS FOR WHOLE, AND CUT STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE C)

Sample Units × Sample Unit Size			1×400	1.5×400	3×400	6×400	13×400	21×400	29×400
Units of Product			[1] 400	[2] 600	1200	2400	5200	8400	11600
TOL	AQL [3]	Quality factors	Acceptance numbers						
1.00	0.80	Extraneous Vegetable Material	6	8	15	26	52	80	108
3.00	2.60	Stems	16	22	40	75	154	242	330
3.75	3.30	Major Blemishes	19	27	50	94	193	304	415
12.75	12.00	Total Blemishes (Major + Minor)	58	85	162	314	663	1057	1449
10.75	10.10	Mechanical Damage	50	72	138	266	561	894	1225
N/A	N/A	Short Pieces, Whole Style	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18.25	17.40	Short Pieces, Cut Style	82	119	230	448	950	1519	2085
8.50	7.90	Edible Fiber	41	59	111	212	444	706	966
3.75	3.30	Inedible Fiber	19	27	50	94	193	304	415
17.75	16.90	Color Defectives	80	116	224	435	923	1476	2027
N/A	N/A	Character—"B"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	Character—"C"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10.75	10.10	Character—"SStd"	50	72	138	266	561	894	1225

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 5200.

TABLE III.—ACCEPTANCE NUMBERS FOR SHORT CUT, AND MIXED CUT STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE A)

Sample Units × Sample Unit Size			1×400	1.5×400	3×400	6×400	13×400	21×400	29×400
Units of Product			[1] 400	[2] 600	1200	2400	5200	8400	11600
TOL	AQL [3]	Quality factors	Acceptance numbers						
0.25	0.162	Extraneous Vegetable Material	2	2	4	7	13	19	26
0.75	0.58	Stems	5	6	11	20	39	60	81
1.25	1.02	Major Blemishes	7	10	18	33	65	101	136
3.75	3.30	Total Blemishes (Major + Minor)	19	27	50	94	193	304	415

3.00	2.60	Mechanical Damage	16	22	40	75	154	242	330
1.75	1.48	Edible Fiber	10	14	25	45	91	142	193
0.10	0.05	Inedible Fiber	1	1	2	3	5	7	10
5.50	5.00	Color Defectives	27	39	73	138	286	454	620
10.75	10.10	Character—"B"	50	72	138	266	561	894	1225
1.25	1.02	Character—"C"	7	10	18	33	65	101	136
0.10	0.05	Character—"SStd"	1	1	2	3	5	7	10

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 5200.

TABLE IIIa—ACCEPTANCE NUMBERS FOR SHORT CUT, AND MIXED CUT STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE B)

Sample Units × Sample Unit Size			1×400	1.5×400	3×400	6×400	13×400	21×400	29×400
Units of Product			[1] 400	[2] 600	1200	2400	5200	8400	11600
TOL	AQL [3]	Quality factors	Acceptance numbers						
0.50	0.366	Extraneous Vegetable Material	3	4	8	13	26	40	53
1.50	1.25	Stems	8	12	21	39	78	122	165
2.50	2.17	Major Blemishes	13	19	34	64	130	204	278
6.75	6.20	Total Blemishes (Major + Minor)	33	47	88	169	352	559	763
6.00	5.50	Mechanical Damage	30	42	79	151	314	498	680
4.50	4.00	Edible Fiber	22	32	59	112	232	366	500
1.50	1.25	Inedible Fiber	8	12	21	39	78	122	165
10.75	10.10	Color Defectives	50	72	138	266	561	894	1225
N/A	N/A	Character—"B"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10.75	10.10	Character—"C"	50	72	138	266	561	894	1225
1.25	1.02	Character—"SStd"	7	10	18	33	65	101	136

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 5200.

TABLE IIIb.—ACCEPTANCE NUMBERS FOR SHORT CUT, AND MIXED CUT STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE C)

Sample Units × Sample Unit Size	1×400	1.5×400	3×400	6×400	13×400	21×400	29×400
Units of Product	[1] 400	[2] 600	1200	2400	5200	8400	11600

TOL	AQL [3]	Quality factors	Acceptance numbers						
1.00	0.80	Extraneous Vegetable Material	6	8	15	26	52	80	108
3.00	2.60	Stems	16	22	40	75	154	242	330
3.75	3.30	Major Blemishes	19	27	50	94	193	304	415
8.50	7.90	Total Blemishes (Major + Minor)	41	59	111	212	444	706	966
10.75	10.10	Mechanical Damage	50	72	138	266	561	894	1225
8.50	7.90	Edible Fiber	41	59	111	212	444	706	966
3.75	3.30	Inedible Fiber	19	27	50	94	193	304	415
17.75	16.90	Color Defectives	80	116	224	435	923	1476	2027
N/A	N/A	Character—"B"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	Character—"C"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10.725	10.10	Character—"SStd"	50	72	138	266	561	894	1225

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 5200.

TABLE IV—ACCEPTANCE NUMBERS FOR FRENCH STYLE FROZEN GREEN BEANS AND WAX BEANS GRADE A

Sample Units × Sample Unit Size	1×200×2.5	1.5×200×2.5	3×200×2.5	6×200×2.5	13×200×2.5	21×200×.5	29×00×.5
Grams of Product	[1] 500	[2] 750	1500	3000	6500	10500	14500

TOL	AQL [3]	Quality factors	Acceptance numbers						
0.25	0.153	Extraneous Vegetable Material (No. of Pieces)	1	1	2	4	7	10	14
0.75	0.541	Stems (No. of stems)	3	4	6	11	20	30	41
1.25	0.961	Major Blemishes (Grams)	10	15	25	43	83	128	170
2.50	2.05	Total Blemishes [(Grams) Major + Minor]	18	25	45	83	163	253	343
10.0	9.0	Small pieces & odd cuts (Grams)	63	88	165	313	648	1025	1400
5.50	4.80	Color Defectives (Grams)	38	50	95	175	358	563	765
N/A	N/A	Character—"B" (Grams)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6.75	6.00	Character—"C" (Grams)	45	63	115	215	440	695	945
1.75	1.40	Character—'SStd" (Grams)	13	18	33	58	115	178	240

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 2600.

TABLE IVA.—ACCEPTANCE NUMBERS FOR FRENCH STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE B)

Sample Units × Sample Unit Size			1×200×2.5	1.5×200×2.5	3×200×2.5	6×200×2.5	13×200×2.5	21×200×2.5	29×200×2.5
Grams of Product			[1] 500	[2] 750	1500	3000	6500	10500	14500
TOL	AQL [3]	Quality factors	Acceptance numbers						
0.50	0.325	Extraneous Vegetable Material (No. of Pieces)	2	2	4	7	13	20	26
1.50	1.16	Stems (No. of stems)	5	6	11	20	39	60	81
2.50	2.05	Major Blemishes (Grams)	18	25	45	83	163	253	343
3.75	53.20	Total Blemishes [(Grams) Major + Minor]	25	38	65	120	245	383	520
15.0	13.9	Small pieces & odd cuts (Grams)	90	128	243	465	978	1553	2125
10.75	9.80	Color Defectives (Grams)	68	95	178	338	703	1113	1520
N/A	N/A	Character—"B"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20.00	18.80	Character—"C" (Grams)	118	168	320	620	1305	2078	2848
5.50	4.80	Character—"SStd" (Grams)	38	50	95	175	358	563	765

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 2600.

TABLE IVB.—ACCEPTANCE NUMBERS FOR FRENCH STYLE FROZEN GREEN BEANS AND WAX BEANS (GRADE C)

Sample Units × Sample Unit Size			1×200×2.5	1.5×200×2.5	3×200×2.5	6×200×2.5	13×200×2.5	21×200×2.5	29×200×2.5
Grams of Product			[1] 500	[2] 750	1500	3000	6500	10500	14500
TOL	AQL [3]	Quality factors	Acceptance numbers						
1.00	0.733	Extraneous Vegetable Material (No. of Pieces)	3	4	8	13	26	40	53
3.00	2.50	Stems (No. of stems)	8	12	21	39	78	122	165
3.75	3.20	Major Blemishes (Grams)	25	38	65	120	245	383	520
10.75	9.80	Total Blemishes [(Grams)Major + Minor]	68	95	178	338	703	1113	1520
20.0	18.8	Small pieces & odd cuts (Grams)	118	168	320	620	1305	2078	2848
17.75	16.60	Color Defectives (Grams)	105	150	285	550	1158	1843	2523
N/A	N/A	Character—"B" (Grams)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	Character—"C" (Grams)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

12.50	11.50	Character—''SStd'' (Grams)	75	108	205	390	813	1293	1768

[1] For unofficial samples.
[2] For use with small container sizes only.
[3] AQL calculated from tolerance (TOL) at 2600.

§ 52.2329 Sample size.

The sample size used to determine whether the requirements of these standards are met shall be as specified in the sampling plans and procedures contained in §§ 52.1 through 52.83.

§ 52.2330 Quality requirement criteria.

(a) *Lot inspection.* A lot of frozen beans is considered as meeting the requirements for quality if:

(1) The prerequisite requirements specified in § 52.2326 and § 52.2328, Table I, are met; and

(2) None of the allowances for the individual quality factors specified in Tables II, IIa, IIb, III, IIIa, IIIb, IV, IVa, and IVb of § 52.2328, as applicable for the style, are exceeded.

(b) *Single sample unit.* Each unofficial sample unit submitted for quality evaluation will be treated individually and is considered as meeting the requirements for quality if:

(1) The prerequisites requirements specified in § 52.2326 and § 52.2328, Table I, are met; and

(2) The Acceptable Quality Levels in Tables II, IIa, IIb, III, IIIa, IIIb, IV, IVa, and IVb of § 52.2328, as applicable for the style, are not exceeded.

Subpart—United States Standards for Grades of Dried Prunes

SOURCE: 21 FR 8177, Oct. 25, 1956, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

PRODUCT DESCRIPTION, VARIETAL TYPES, SIZES, GRADES

§ 52.3181 Product description.

Dried prunes are prepared from sound, properly matured prune plums from which the greater portion of moisture is removed by drying. The dried prunes are cleaned to assure a wholesome product; they may be treated with water or steam; and a safe and suitable preservative may be added.

[30 FR 11596, Sept. 10, 1965. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§ 52.3182 Varietal types of dried prunes.

(a) *Type I.* French; or Robe; or a mixture of French and Robe.

(b) *Type II.* Italian.

(c) *Type III.* Imperial; or Sugar; or a mixture of Imperial and Sugar.

(d) *Type IV.* Any other types; or mixtures of any types other than mixtures in Type I and Type III of this section.

§ 52.3183a Styles of dried prunes.

(a) Whole Unpitted—from which pits have not been removed.

(b) Whole Pitted—from which pits have been removed.

[30 FR 11596, Sept. 10, 1965. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§ 52.3183b Count-sizes of whole unpitted dried prunes.

(a) *Count-sizes.* Except for U.S. Grade A or U.S. Fancy, the count-sizes of dried prunes are not incorporated in the grades of dried prunes. The count-sizes of dried prunes in this subpart refer to the count (or number) of prunes per pound of dried prunes. The various sizes of dried prunes for the respective varietal types are commonly designated as follows, but may be designated by other numerical expressions:

(1) *Type I; Type IV.* 30/40, 40/50, 50/60, 60/70, 70/80, 80/90, 90/100, 100/120, 120 and over.

(2) *Type II.* 25/35, 35/45, 30/40, 40/50, 50/60, 60/70, 70/80, 80/90, 90/100.

(3) *Type III.* 15/20, 18/24, 20/30, 30/40, 40/50, 50/60, 60/70.

(b) *Recommended size nomenclature.* The following size nomenclature is recommended for the respective ''countsizes'' of dried prunes:

Extra large ...	Average: Not more than 43 prunes per pound.
Large	Average: Not more than 53 prunes per pound.
Medium	Average: Not more than 67 prunes per pound.
Small	Average: Not more than 85 prunes per pound.

[21 FR 8177, Oct. 25, 1956. Redesignated at 30 FR 11596, Sept. 10, 1965 and 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§ 52.3184 Grades of dried prunes.

(a) ''U.S. Grade A'' or ''U.S. Fancy'' is the quality of dried prunes that, except for mixed types, possess similar varietal characteristics; that are fairly uniform in size and average 85 prunes or less per pound; that meet the applicable moisture limits in Table IV of this subpart but regardless of size and kind of packaging are reasonably uniform in moisture; and that do not exceed the total allowances and limitations for defects shown in Table I of this subpart.

(b) ''U.S. Grade B'' or ''U.S. Choice'' is the quality of dried prunes that, except for mixed types, possess similar varietal characteristics; that are fairly uniform in size; that meet the applicable moisture limits in Table IV of this subpart but regardless of size and kind of packaging are reasonably uniform in moisture; and that do not exceed the total allowances and limitations for defects shown in Table II of this subpart.

(c) ''U.S. Grade C'' or ''U.S. Standard'' is the quality of dried prunes that, except for mixed types, possess similar varietal characteristics; that are fairly uniform in size; that meet the applicable moisture limits in Table IV of this subpart but regardless of size and kind of packaging are reasonably uniform in moisture; and that do not exceed the total allowances and limitations for defects shown in Table III of this subpart

(d) ''Substandard'' is the quality of dried prunes that meet the applicable moisture limits in Table IV of this subpart but regardless of size and kind of packaging are reasonably uniform in moisture; and that may fail to meet other requirements for U.S. Grade C or U.S. Standard, but not more than 5 percent, by weight, of the dried prunes may be affected by mold, dirt, foreign material, insect infestation, or decay: *Provided,* That not more than 1 percent, by weight, of the dried prunes may be affected by decay.

TABLE I—U.S. GRADE A OR U.S. FANCY; ALLOWANCES FOR DEFECTS

Total allowance		Limitations	
Not more than a total of 10 percent, by weight, may be damaged or affected by:	Not more than 6 percent, by weight, may be damaged or affected by:	Not more than 3 percent, by weight, may be affected by:	Not more than 1 percent, by weight, may be affected by:
Off-color.	Poor texture.	Mold.	Decay.
Poor texture.	End cracks.	Dirt.	
End cracks.	Skin or flesh damage.[2]	Foreign material.	
Skin or flesh damage.[2]	Fermentation.	Insect infestation.	
Fermentation.	Scars.	Decay.	
Scars.	Heat damage.		
Heat damage.	Insect injury.		
Insect injury.	Other means.		
Other means.	Mold.		
Mold.	Dirt.		
Dirt.	Foreign material.		
Foreign material.	Insect infestation.		
Inset infestation.			
Decay.	Decay.		

TABLE II—U.S. GRADE B OR U.S. CHOICE: ALLOWANCES FOR DEFECTS

Total allowance		Limitations	
Not more than a total of 15 percent, by weight, may be damaged or affected by:	Not more than 8 percent, by weight, may be damaged or affected by:	Not more than 4 percent, by weight, may be affected by:	Not more than 1 percent, by weight, may be affected by:
Off-color.	Poor texture.	Mold	Decay.
Poor texture.	End cracks.	Dirt.	
End cracks.	Skin or flesh. damage.[2]	Foreign material.	
Skin or flesh damage.[2]	Fermentation.	Inset infestation.	
Fermentation.	Scars.	Decay.	
Scars.	Heat damage.		

TABLE II—U.S. GRADE B OR U.S. CHOICE: ALLOWANCES FOR DEFECTS—Continued

Total allowance		Limitations	
Heat damage. Insect injury. Other means. Mold. Dirt. Foreign material. Insect infestation. Decay.	Inset injury. Other means. Mold. Dirt Foreign material. Insect infestation. Decay.		

TABLE III—U.S. GRADE C OR U.S. STANDARD ALLOWANCES FOR DEFECTS

Total allowance		Limitations	
Not more than a total of 20 percent, by weight, may be damaged or affected by: Off-color. Poor texture. End cracks.[1] Skin or flesh damage.[2] Fermentation. Scars. Heat damage. Insect injury. Other means. Mold. Dirt. Foreign material. Insect infestation. Decay.	Not more than 10 percent, by weight, may be damaged or affected by: End cracks.[1] Skin or flesh damage.[2] Fermentation. Scars. Heat damage. Insect injury. Other means. Mold. Dirt. Foreign material. Insect infestation. Decay.	Not more than 8 percent, by weight, may be damaged or affected by: Skin or flesh damage.[2] Fermentation. Scars. Heat damage. Insect injury. Other means. Mold. Dirt. Foreign material. Insect infestation. Decay.	Not more than 5 percent, by weight, may be affected by: Mold. Dirt. Foreign material. Insect infestation. Decay. *Provided,* That not more than 1 percent, by weight, may be affected by decay.

[1] Except that each 1 percent of end cracks to, and including, 8 percent, by weight, shall be considered as ½ percent damaged by end cracks; and any additional end cracks shall be calculated as true percentage, by weight.
[2] Not applicable to ''Whole Pitted'' style.

TABLE IV—MOISTURE ALLOWANCES FOR DRIED PRUNES

[Non-hermetically sealed containers; 10 pounds or more]

Grades	Maximum moisture limits (percent)	
	Counts averaging 60 or less per pound	Counts averaging 61 or more per pound
U.S. Grade A or U.S. fancy	25	24
U.S. Grade B or U.S. choice	25	24
U.S. Grade C or U.S. standard	25	24
Substandard	25	24

[21 FR 8177, Oct. 25, 1956, as amended at 30 FR 11596, Sept. 10, 1965. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

MOISTURE, UNIFORMITY OF SIZE, DEFECTS

§ 52.3185 Moisture limits.

Dried prunes shall not exceed the moisture limits for the applicable grades and kind and size of packaging as designated in Table IV of this subpart except there is no moisture limit when safe and suitable preservatives have been added. ''Moisture'' means the percentage by weight of the finished dried prunes, exclusive of pits, that is moisture when determined by the Dried Fruit Moisture Tester Method or in accordance with methods that give equivalent results. The moisture limits in Table IV apply only to so-called ''bulk packs'' of dried prunes packaged in non-hermetically sealed containers holding 10 pounds or more of dried prunes when safe and suitable preservatives have not been added. Such containers include, but are not limited to, wood boxes or fiber boxes.

[30 FR 11596, Sept. 10, 1965. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

§ 52.3186 Definitions for uniformity of size.

(a) *Fairly uniform in size.* ''Fairly uniform in size'' means that in a sample of 100 ounces:

(1) For prunes that average 53 prunes or less per pound, the count per pound of 10 ounces of the smallest prunes does not vary from the count per pound of 10 ounces of the largest prunes by more than 25 points; or

(2) For prunes that average 54 prunes or more per pound, the count per pound of 10 ounces of the smallest prunes does not vary from the count per pound of 10 ounces of the largest prunes by more than 45 points.

§ 52.3187 Definitions and explanations of defects.

Dried prunes damaged or affected by the following are scorable as defects:

(a) *Off-color.* ''Off-color'' means a skin color different from characteristic black, blue-black, reddish-purple, or other characteristic skin color for the type.

(b) *Poor texture.* ''Poor texture'' means porous, woody, or fibrous flesh or immature prunes or prunes possessing flesh interspersed with excessive air pockets in which the texture of the flesh is noticeably different from the flesh of mature prunes which have been properly dried, handled, and processed. ''Excessive air pockets'' means that the prunes are affected by air pockets to the extent that the appearance and eating quality is seriously affected.

(c) *End cracks.* ''End cracks'' means callous apex-end cracks which, singly or in the aggregate on a prune, are more than ⅜ inch in length but not more than ½ inch in length.

(d) *Skin or flesh damage.* ''Skin or flesh damage'' in the case of ''Whole Unpitted'' style means:

(1) Callous growth cracks (other than callous apex-end cracks) which, singly or in the aggregate on a prune, exceed ⅜ inch in length; and callous apex-end cracks which, singly or in the aggregate on a prune, exceed ½ inch in length.

(2) Splits or skin breaks not having callous edges when the flesh is mashed out beyond the protecting skin so as to affect materially the normal appearance of the prune;

(3) Any cracks, splits, or skin breaks open to the pit;

(4) Any skin damage from multiple short skin breaks giving a very ''rough'' appearance to the prune such as may result from over-dipping, rain damage, processing, or other causes which in Type I dried prunes affect materially the appearance or edibility of the prune, or which in other types or other mixtures affect markedly the appearance or edibility of the prune.

(e) *Fermentation.* ''Fermentation'' means that the prune is fermented as evidenced by a distinct sour taste or odor or by darkening in color characteristic of fermentation or souring.

(f) *Scars.* ''Scars'' mean:

(1) Tough or thick scab which, singly or in combination on a prune, exceeds the area of a circle ⅜ inch in diameter such as may result from thrip injury, mildew, leaf chafing, limb rubs, or other means; or

(2) Scab which is not tough or thick and which, singly or in combination on a prune, exceeds the area of a circle ¾ inch in diameter and which is inconsequential but unsightly though practically blending in color with the skin on the portion of the prune not affected.

(g) *Heat damage.* ''Heat damage'' means burning or scorching from the sun or in dehydration so as to damage materially the skin or flesh, or both, of the prune.

(h) *Insect injury.* ''Insect injury'' means healed or unhealed surface blemishes and healed or unhealed blemishes extending into the flesh which affect materially the appearance, edibility, or keeping quality of the prune but which do not possess evidence of insect infestation.

(i) *Other means.* ''Other means'' includes damage by any injury or defect or group of defects not specifically mentioned in this section which materially affects the appearance, edibility, or keeping quality of the fruit, but ''other means'' does not include defects of a nature such as defined in paragraph (j), (k), (l), (m), or (n) of this section.

(j) *Mold.* ''Mold'' means a characteristic fungus growth as evidenced by a moldy or smutty condition and which, singly or in the aggregate on a prune, is equal to or exceeds the area of a circle 3/16 inch in diameter.

(k) *Dirt.* ''Dirt'' means the presence of any quantity of such substance, whether imbedded or adhering to the

prune, which gives the prune a dirty, smudgy appearance and which may not be removed readily by washing.

(l) *Foreign material.* ''Foreign material'' means leaves, twigs, pieces of wood, and similar extraneous materials which are objectionable.

(m) *Insect infestation.* ''Insect infestation'' means the presence of dead insects, insect fragments, or insect remains. (No live insects are permitted).

(n) *Decay.* ''Decay'' means a state of decomposition, wholly or in part, of the prune.

[21 FR 8177, Oct. 25, 1956, as amended at 30 FR 11596, Sept. 10, 1965. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

WORK SHEET

§ 52.3188 Work sheet for dried prunes.

Size and kind of container ....
Container mark or identification ....
Label or brand ....
Varietal type ....
Style ....
Size:
Count per pound (Average) ....
Uniformity ....
( ) Extra large ....
( ) Large ....
( ) Medium ....
( ) Small ....
Moisture content percent; Uniformity ....
Varietal characteristics: ( ). Similar. ( ) Dissimilar.

Defects and summary of allowances [1]	Grade A maximum	Grade B maximum	Grade C maximum	Substandard maximum
Total of all defects, including off-color	10 percent	15 percent	.....	No limit except as indicated below.
Total of all defects, including off-color and poor texture.	.....	.....	20 percent.	
Poor texture, end cracks, skin or flesh damage,[3] fermentation, scars, heat damage, insect injury, other means, mold, dirt, foreign material, insect infestation, decay.	But no more than 6 percent.	But no more than 8 percent.	.	
End cracks,[2] skin or flesh damage,[3] fermentation, scars, heat damage, insect injury, other means, mold, dirt, foreign material, insect infestation, decay.	.....	.....	10 percent [2].	
Skin or flesh damage,[3] fermentation, scars, heat damage, insect injury, other means, mold, dirt, foreign material, insect infestation, decay.	.....	.....	But no more than 8 percent.	
Mold, dirt, foreign material, insect infestation, decay.	3 percent	4 percent	5 percent	5 percent.
Decay	But no more than 1 percent.	But no more than 1 percent.	But no more than 1 percent.	But no more than 1 percent.

Total
U.S. Grade (including all factors)

[1] Percentages of defects are ''by weight.''
[2] Except that each 1 percent of end cracks to, and including 8 percent, by weight, shall be considered as ½ percent damaged by end cracks; and any additional end cracks shall be calculated as true percentage, by weight.
[3] Allowances for ''skin or flesh damage'' apply only to ''Whole Unpitted'' style.

[21 FR 8177, Oct. 25, 1956, as amended at 30 FR 11596, Sept. 10, 1965. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981]

Subpart—United States Standards for Grades of Canned Ripe Olives [1]

SOURCE: 42 FR 38585, July 29, 1977, unless otherwise noted. Redesignated at 46 FR 63203, Dec. 31, 1981.

PRODUCT DESCRIPTION, TYPES, STYLES, AND GRADES

§ 52.3751 Product description.

Canned ripe olives are prepared from properly matured olives which have first been properly treated to remove the characteristic bitterness; are packed in a solution of sodium chloride, with or without spices, and are sufficiently processed by heat in hermetically sealed containers. Canned olives which are not oxidized in processing and which possess a tan to light bronze color indicative of preparation from olives of advanced maturity and commonly referred to as ''tree-ripened'' or ''home-cured'' are not covered by the standards in this subpart.

§ 52.3752 Types of canned ripe olives.

Canned ripe olives are processed as two distinct types. Unless a specific type is stated in this subpart, ''canned ripe olives'' refers to olives of either ''ripe-type'' or ''green-ripe type.''

(a) *Ripe type.* ''Ripe type'' olives are those which have been treated and oxidized in processing to produce a typical dark brown to black color.

(b) *Green-ripe type.* ''Green-ripe type'' olives are those which have not been oxidized in processing; which range in color from yellow-green; green-yellow or other greenish casts; and which may be mottled.

[1] Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act, or with applicable State laws and regulations.

§ 52.3753 Styles of canned ripe olives.

(a) *Whole.* ''Whole'' olives are those which have not been pitted.

(b) *Pitted.* ''Pitted'' olives are those from which pits have been removed.

(c) *Halved.* ''Halved'' olives are pitted olives in which each olive is cut lengthwise into two approximately equal parts.

(d) *Segmented.* ''Segmented'' olives are pitted olives in which each olive is cut lengthwise into three or more approximately equal parts.

(e) *Sliced.* ''Sliced'' olives consist of parallel slices of fairly uniform thickness prepared from pitted olives.

(f) *Chopped.* ''Chopped'' olives are random-size cut pieces or cut bits prepared from pitted olives.

(g) *Broken pitted.* ''Broken pitted'' olives consist substantially of large pieces that may have been broken in pitting but have not been sliced or cut.

§ 52.3754 Size designations for whole and pitted styles.

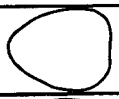
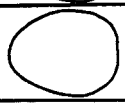
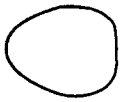
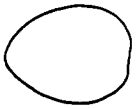
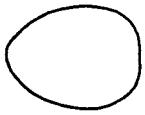
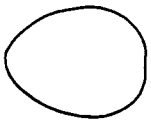
(a) *General.* (1) ''Average count'' for canned whole ripe olives is determined from all containers in the sample and is calculated on the basis of the drained weight of the olives.

(2) Diameters of canned whole and pitted ripe olives are determined by measuring the smallest diameters at the largest circumferences at right angles to the longitudinal axes of the olives. The longitudinal axis is a line running from the stem to the apex of the olive.

(b) *Size determination.* Size of canned whole or pitted olives shall conform to the applicable count per pound range indicated in Table I in the case of whole olives, or conform closely to the applicable illustration in Table I in the case of pitted olives. When the count per pound of whole olives falls between two count ranges, the size designation shall be the next smaller size.

TABLE I

SIZE - CANNED WHOLE AND PITTED RIPE OLIVES

DESIGNATION	COUNT PER POUND	ILLUSTRATION	APPROXIMATE DIAMETER RANGE ILLUSTRATED (mm)
SMALL	128 - 140		16 - 17
MEDIUM	106 - 121		17 - 19
LARGE	91 - 105		19 - 20
EXTRA LARGE	65 - 88		20 - 22
JUMBO	51 - 60		22 - 24
COLOSSAL	41 - 50		24 - 26
SUPER COLOSSAL	40 or less		26 and over

[42 FR 38585, July 29, 1977, as amended at 46 FR 39564, Aug. 4, 1981. Redesignated at 46 FR 63203, Dec. 31, 1981, and amended at 48 FR 41012, Sept. 13, 1983]

§ 52.3755 Minimum drained weights.

(a) *General.* (1) The minimum drained weights for the various applicable styles in Table II and III are not incorporated in the grade of the finished product since drained weight, as such, is not a factor of quality for the purposes of these grades.

(2) The minimum drained weights are based on equalization of the product 30 days or more after the product has been canned.

(b) *Method for determining drained weight.* The drained weight of canned ripe olives is determined by emptying the contents of the container upon a U.S. Standard No. 8 circular sieve of proper diameter containing eight meshes to the inch (2.3 mm (0.0937 inch), ±3 percent, square openings) so as to distribute the product evenly over the sieve. Without shifting the product, incline the sieve at an angle of 17 degrees to 20 degrees to facilitate drainage and allow to drain for 2 minutes. The weight of drained olives is the weight of the sieve and product less the weight of the dry sieve. A sieve 20 mm (8 inches) in diameter is used for containers with total contents of 1.5 kg

(3.3 lbs) and less, and a sieve 30 mm (12 inches) in diameter is used for containers with total contents greater than 1.5 kg (3.3 lbs).

(c) *Compliance with minimum drained weights.* A lot of canned ripe olives is considered as meeting the minimum drained weights if the following criteria are met:

(1) The average of the drained weights from all the sample units in the sample is equal to or greater than the acceptance value for drained weights for the size (designated as ''X_2'' in Tables II and III); and

(2) There shall be no unreasonable shortage in any individual container.

TABLE II—ACCEPTANCE VALUES FOR DRAINED WEIGHTS—WHOLE

	211 X 304		300 X 407		603 X 700	
	$\bar{X}d$ ounces	$\bar{X}d$ grams	$\bar{X}d$ ounces	$\bar{X}d$ grams	$\bar{X}d$ ounces	$\bar{X}d$ grams
Small	4.5	127.5	7.75	219.7	66.0	1871.1
Medium	4.5	127.5	7.75	219.7	66.0	1871.1
Large	4.5	127.5	7.75	219.7	66.0	1871.1
Extra large	4.5	127.5	7.5	212.6	66.0	1871.1
Jumbo	4.0	113.4	7.25	205.5	64.0	1814.4
Colossal	4.0	113.4	7.25	205.5	64.0	1814.4
Super colossal	4.0	113.4	7.25	205.5	64.0	1814.4

TABLE II—ACCEPTANCE VALUES FOR DRAINED WEIGHTS—PITTED

	211 X 304		300 X 407		603 X 700	
	$\bar{X}d$ ounces	$\bar{X}d$ grams	$\bar{X}d$ ounces	$\bar{X}d$ grams	$\bar{X}d$ ounces	$\bar{X}d$ grams
Small	3.25	92.1	6.0	170.1	51.0	1445.8
Medium	3.25	92.1	6.0	170.1	51.0	1445.8
Large	3.5	99.2	6.0	170.1	51.0	1445.8
Extra large	3.5	99.2	6.0	170.1	51.0	1445.8
Jumbo	3.25	92.1	5.75	163.0	49.0	1389.1
Colossal	3.25	92.1	5.75	163.0	49.0	1389.1
Super colossal	3.25	92.1	5.75	163.0	49.0	1389.1

TABLE III—ACCEPTANCE VALUE FOR DRAINED WEIGHTS (OUNCES)

	Water capacity oz. avdp.	Halved, segmented, sliced		Chopped	
		X_d	*LL*	X_d	*LL*
200 x 214	.....	2.3	1.9	4.2	3.9
211 x 200	4.9	2.3	1.9	4.2	3.9
305 x 109	.....	3.0	2.6	5.5	5.2
307 x 113	.....	3.0	2.6	5.5	5.2
211 x 304	8.65	3.8	3.4	7.6	7.2
No. 300 (300 x 407)	15.2	6.5	6.1	13.3	12.7
No. 10 (603 x 700)	109.45	55.0	53.4	90.0	87.8
No. 10 (brine pack)	.....	.....	.....	64.0	62.4
BROKEN PITTED					
No. 300 (300 x 407)	15.2	5.6	4.7	.....	.....
No. 10 (603 x 700)	109.45	51.0	48.8	.....	.....

TABLE III—ACCEPTANCE VALUE FOR DRAINED WEIGHTS (GRAMS)

	Water capacity	Halved, segmented, sliced		Chopped	
		X_d	*LL*	X_d	*LL*
200 x 214	.....	65.2	53.9	119.1	110.6
211 x 200	138.9	65.2	53.9	119.1	110.6
305 x 109	.....	85.0	73.7	155.9	147.4
307 x 113	.....	85.0	73.7	155.9	147.4
211 x 304	245.2	107.7	96.4	215.4	204.1
No. 300 (300 x 407)	430.9	184.2	172.9	377.0	360.0

TABLE III—ACCEPTANCE VALUE FOR DRAINED WEIGHTS (GRAMS)—Continued

	Water capacity	Halved, segmented, sliced		Chopped	
		X_d	LL	X_d	LL
No. 10 (603 x 700)	3102.8	1559.2	1513.8	2551.4	2489.0
No. 10 (brine pack)	.....	.....	.....	1814.3	1769.0
BROKEN PITTED					
No. 300 (300 x 407)	430.9	158.8	133.2	.....	.....
No. 10 (603 x 700)	3102.8	1445.8	1383.4	.....	.....

[42 FR 38585, July 29, 1977; 42 FR 44542, Sept. 6, 1977, as amended at 46 FR 39566, Aug. 4, 1981. Redesignated at 46 FR 63203, Dec. 31, 1981]

§ 52.3756 Grades of canned ripe olives.

(a) *U.S. Grade A* is the quality of canned ripe olives of whole, pitted, halved, segmented, sliced, and chopped styles that has a good flavor, that has a good color, that is practically free from defects, that has a good character; and that for those factors which are rated in accordance with the scoring system outlined in this subpart, the total score is not less than 90 points: *Provided,* That such canned ripe olives may have a reasonably good color if the total score is not less than 90 points; and further *Provided,* That in the styles of whole and pitted olives, the variation in diameters does not exceed 4 mm, and of the 90 percent, by count, of the most uniform in size, the diameter of the largest does not exceed the diameter of the smallest by more than 3 mm.

(b) *U.S. Grade B* is the quality of canned ripe olives of whole, pitted, halved, segmented, sliced, and chopped styles that has a good flavor, that has a reasonably good color, that is reasonably free from defects, that has a reasonably good character; and that for those factors which are rated in accordance with the scoring system outlined in this subpart, the total score is not less than 80 points: *Provided,* That for the styles of whole and pitted olives, the variation in diameters does not exceed 8 mm, and of the 80 percent, by count, of the most uniform in size, the diameter of the largest does not exceed the diameter of the smallest by more than 4 mm.

(c) *U.S. Grade C* is the quality of canned ripe olives of whole, pitted, halved, segmented, sliced, chopped, and broken pitted styles that has a reasonably good flavor, that has a fairly good color, that is fairly free from defects, that has a fairly good character; and that for those factors which are rated in accordance with the scoring system outlined in this subpart, the total score is not less than 70 points; *Provided,* That for the styles of whole and pitted olives, of the 60 percent, by count, of the most uniform in size, the diameter of the largest does not exceed the diameter of the smallest by more that 4 mm.

(d) *Substandard* is the quality of canned ripe olives of any style that fail to meet the applicable requirements for U.S. Grade C.

[42 FR 38585, July 29, 1977. Redesignated at 46 FR 63203, Dec. 31, 1981 and amended at 48 FR 41013, Sept. 13, 1983]

§ 52.3757 Standard sample unit size.

Compliance with requirements for the various quality factors except ''size designation'' is based on the following standard sample unit size for the applicable style:

(a) *Whole and pitted*—50 olives.

(b) *Halved*—100 units.

(c) *All other styles*—255 g (9 ounces).

§ 52.3758 Determining the grade of a sample unit.

(a) *General.* In addition to considering other requirements outlined in the standards the following quality factors are evaluated:

(1) *Factors not rated by score points.* (i) Flavor; (ii) Uniformity of size (styles of whole and pitted only).

(2) *Factors rated by score points.* The relative importance of each factor which is scored is expressed numerically on the scale of 100. The maximum

number of points that may be given such factors are:

	Points
(i) Color	30
(ii) Absence of defects	40
(iii) Character	30
Total score	100

(b) *Definition of flavor*—(1) *Good flavor.* (i) ''Good flavor'' in ripe type means a distinctive flavor characteristic of ripe type olives (including that of properly spiced olives) which have been properly prepared and processed and which are free from objectionable flavors of any kind.

(ii) ''Good Flavor'' in green-ripe type means a distinctive mellow flavor characteristic of green-ripe type olives which have been properly prepared and processed and which are free from objectionable flavors of any kind.

(2) *Reasonably good flavor.* ''Reasonably good flavor'' in either ripe type or green-ripe type (including that of properly spiced olives) means that the flavor may be slightly lacking in distinctly characteristic flavor for the respective type but the olives are free from objectionable flavors of any kind.

§ 52.3759 Determining the rating for the factors which are scored.

The essential variations within each factor which is scored are so described that the value may be determined for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example ''27 to 30 points'' means 27, 28, 29, and 30 points).

§ 52.3760 Color.

(a) *General.* The evaluation of color shall be determined within five minutes after the olives are removed from the container and is based upon the uniformity of the exterior color or general appearance as to color of the olives within the container. The evaluation of color in ''halved'' style is based on the uncut surfaces.

(b) *Color measurement of ripe type.* The color of ripe type is determined by comparison with a spinning disc of variations in percentages of the following Munsell color discs: Red (5R 4/14), Yellow (2.5Y 8/12), and Black (N/1 Glossy).

(c) *Composite color standards.* Composite USDA Color Standards for Canned Ripe Olives are available and are comparable to the colors produced by the spinning discs.

(d) *Color appearance of green-ripe type.* Normal color for green-ripe type olives is yellow-green, green-yellow, or other greenish casts, any of which may have a mottled appearance that is typical of green-ripe type olives. Off-color means dark brown, dark purple or black olives.

(e) The USDA spinning color discs and the USDA composite color standards cited in paragraphs (b) and (c) of this section are available from the USDA licensed supplier:

Munsell Color Company, Inc., 2441 North Calvert Street, Baltimore, Md. 21218.

(f) *Grade A.* Canned ripe olives that have a good color may be given a score of 27 to 30 points. ''Good color'' has the following meanings with respect to the applicable type and style:

(1) *Ripe type*—(i) *Whole; pitted; halved.* The olives or units have a practically uniform black or dark brown color. Not less than 90 percent, by count, of the olives or units have a color equal to or darker than the appropriate USDA Composite Color Standard or that produced by spinning the Munsell discs specified in paragraph (b) of this section in the following combination: 3½ percent Red, 3½ percent Yellow, and 93 percent Black.

(ii) *Segmented; sliced, chopped.* The general color impression of the olive as a mass is normal and typical of these styles prepared from olives with good color.

(2) *Green-ripe type.* The general color appearance of the olives shall be normal. Not less than 90 percent, by count, shall be practically uniform in such normal color for the type, and no off-color olives may be present.

(g) *Grade B.* If the canned ripe olives have a reasonably good color, a score of 24 to 26 points may be given. ''Reasonably good color'' has the following meanings with respect to the applicable type and style:

(1) *Ripe type*—(i) *Whole; pitted; halved.* The olives or units have a reasonably

uniform black, dark brown or reddish-brown color. Not less than 80 percent, by count, of the olives or units have a color equal to or darker than the appropriate USDA Composite Color Standard or that produced by spinning the Munsell color discs specified in paragraph (b) of this section in the following combination: 6 percent Red, 6 percent Yellow, and 88 percent Black.

(ii) *Segmented; sliced; chopped.* The general color impression of the olives as a mass is normal and typical of these styles prepared from olives with reasonably good color.

(2) *Green-ripe type.* The general color appearance of the olives shall be normal. Not less than 80 percent, by count, shall be reasonably uniform in such normal color for the type, and no off-color olives may be present.

(h) *Grade C.* If the ripe olives have a fairly good color, a score of 21 to 23 points may be given. Canned ripe olives that fall into this classification shall not be graded above U.S. Grade C regardless of the total score for the product (this is a limiting rule). ''Fairly good color'' has the following meanings with respect to the applicable type and style:

(1) *Ripe type*—(i) *Whole; pitted; halved.* The olives or units have a fairly uniform black, dark brown or reddish-brown color. Not less than 60 percent, by count, of the olives or units have a color equal to or darker than the appropriate USDA Composite Color Standard or that produced by spinning the Munsell color discs specified in paragraph (b) of this section in the following combination: 6 percent Red, 6 percent Yellow, and 88 percent Black.

(ii) *Segmented; sliced; chopped.* The general color impression of the olives as a mass is normal and typical of these styles prepared from olives of fairly good color.

(iii) *Broken pitted.* The general color impression of the olives as a mass is normal and may be variable, but is typical of this style prepared from olives of good, reasonably good, or fairly good color.

(2) *Green-ripe type.* The general color impression of the olives shall be normal but may vary markedly for the type. No more than 10 percent, by count, of off-color olives may be present.

(i) *Substandard (SStd.).* Canned ripe olives that are abnormal in color for any reason or that fail to meet the requirements of paragraph (h) of this section may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.3761 Defects.

(a) *General.* The factor of absence of defects refers to the degree of freedom from harmless extraneous vegetable material, stems, and portions thereof, blemishes, wrinkles, mutilated olives, and from any other defects which affect the appearance or edibility of the product.

(b) *Definition of defects*—(1) *Blemishes* mean dark-colored surface marks in either ripe type or green-ripe olives which may or may not penetrate into the flesh. Olives or pieces of olives affected by blemishes are classified as follows:

(i) *Minor blemishes* mean surface discolorations on olives or pieces of olives which individually or collectively materially affect the appearance of the unit.

(ii) *Major blemishes* mean surface discolorations or black flesh (oxidized) on olives or pieces of olives which may or may not be associated with a soft texture below the skin and which individually or collectively seriously affect the appearance or edibility of the unit.

(iii) *Severe blemishes* mean dark brown, dark purple, or black surface areas on olives or pieces of olives of the green-ripe type; or any other blemishes, whether or not specifically defined, which severely affect the appearance or edibility of the unit.

(2) *Blowout* refers to a soft pitted olive in which the pit has been pushed out instead of cut out leaving an irregular ring of flesh that materially affects its appearance.

(3) *Broken piece* in halved, segmented, and sliced style olives means any piece of olive flesh that appears to be less than three-fourths of a full unit. Also included are poorly cut units and end slices less than one-half the average size slice.

(4) *Cross pitted* refers to olives pitted along an axis other than the stem-flower axis. A defect is a unit where the angle of these two axes exceeds 45 degrees.

(5) *Harmless extraneous vegetable material.* Harmless extraneous vegetable material (HEVM), harmless extraneous material (HEM), and extraneous vegetable material (EVM), are synonymous terms and mean any vegetable substance that is harmless.

(6) *Mechanically damaged* means a unit in whole, pitted, and halved styles that is punctured, cut or damaged by means other than pitting so that its appearance is materially affected.

(7) *Misshapen* refers to an olive that does not have a normal shape for a given variety.

(8) *Mutilated* refers to an olive in whole or pitted styles that is so pitter-torn or damaged by other means that the entire pit cavity is exposed or the appearance of the olive is seriously affected.

(9) *Obvious split pit* means a pit in an olive that can be determined visually as split.

(10) *Pitter damage* means a loss of skin and flesh from a pitted olive caused by the pitter on the cut end exceeding the area of a circle 3 mm in diameter but is not mutilated.

(11) *Plunger damage* means a loss of skin and flesh from a pitted olive equal to or exceeding the area of a circle 5 mm in diameter.

(12) *Stem* means a stem that measures 3 mm or more from the shoulder of the olive. Stems are classified as follows:

(i) *Minor stem* is a stem that measures more than 3 mm but not more than 4 mm from the shoulder of the olive.

(ii) *Major stem* is a stem that measures more than 4 mm from the shoulder of the olive.

(iii) *Detached stem,* when it measures 4 mm or more, is a defect which shall be scored as a minor stem for whole pitted, halved, and broken pitted style olives and a major stem for segmented, sliced, and chopped style olives.

(13) *Wrinkles* are grooves 0.5 mm or more in width. Classification of wrinkles shall be determined immediately after removing surface moisture and any increase in wrinkles due to dehydration after removing from the container shall not be considered. Olives or pieces of olives affected by wrinkles are classified as follows:

(i) *Minor wrinkles* are wrinkles which collectively do not more than materially affect the appearance of the unit.

(ii) *Major wrinkles* are wrinkles which collectively more than materially affect the appearance of the unit.

(c) *Grade A.* Canned ripe olives of whole, pitted, halved, segmented, sliced, and chopped styles that are practically free from defects may be given a score of 36 to 40 points. ''Practically free from defects'' means that any defects present, but not specifically limited in Table IV, may not more than slightly affect the appearance or edibility of the olives; and, in addition, specified defects may be present in all other styles except ''broken pitted'' not to exceed the allowances for grade A provided in Table IV.

(d) *Grade B.* If canned ripe olives of whole, pitted, halved, segmented, sliced, and chopped styles are reasonably free from defects, a score of 32 to 35 points may be given. Canned ripe olives that fall into this classification shall not be graded above U.S. Grade B regardless of the total score for the product (this is a limiting rule). ''Reasonably free from defects'' means that any defects present but not specifically limited in Table V may not more than materially affect the appearance or edibility of the olives; and in addition, specified defects may be present in all other styles except ''broken pitted'' not to exceed the allowances for grade B provided in Table V.

(e) *Grade C.* If canned ripe olives of whole, pitted, halved, segmented, sliced, chopped, and broken pitted styles are fairly free from defects, a score of 28 to 31 points may be given. Canned ripe olives that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). ''Fairly free from defects'' means that any defects present but not specifically limited in Table VI may more than materially affect the appearance and edibility of the olives; and in addition, specified defects may be present in all other styles not to exceed the allowances for grade C provided in Table VI.

(f) *Substandard (SStd.).* Canned ripe olives that fail to meet the requirements of paragraph (e) of this section may be given a score of 0 to 27 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

TABLE IV—LIMITS FOR DEFECTS IN GRADE A

	Whole per 50 olives	Pitted per 50 olives	Halved per 100 halves	Segmented per 255 g (9 oz)	Sliced per 255 g (9 oz)	Chopped per 255 g (9 oz)
HEVM, HEM, or EVM	1	1	1	Practically free	Practically free	Practically free.
Stems:						
Minor and major stems incl.	2	2	2			
Major stems	1	1	1	Practically free	Practically free	Practically free.
Minor and major blemishes, minor and major wrinkles and mutilated.	5	5	10	Practically free	Practically free	Practically free.
Provided:						
Major blemishes, major wrinkles do not exceed	2	2	5			
Further Provided: Multilated do not exceed	1	1				
Broken pieces and poorly cut units			8	Practically free	Practically free	
Mechanical damage	2	2	5			
Blowouts, cross pitted, plunger and pitter damage		5				
Obvious split pit or misshapen	2					
Severe blemishes (green-ripe type only)	0	0	0			

TABLE V—LIMITS FOR DEFECTS IN GRADE B

	Whole per 50 olives	Pitted per 50 olives	Halved per 100 halves	Segmented per 255 g (9 oz)	Sliced per 255 g (9 oz)	Chopped per 255 g (9 oz)
HEVM, HEM or EVM	1	1	1	Reasonably free	Reasonably free	Reasonably free.
Stems:						
Minor and major stems incl.	3	3	3			
Major stems	1	1	1	Reasonably free	Reasonably free	Reasonably free.
Minor and major blemishes, minor and major wrinkles and mutilated.	10	10	20	Reasonably free	Reasonably free	Reasonably free.
Provided:						
Major blemishes, major wrinkles do not exceed	5	5	10			
Further provided:						
Mutilated do not exceed	2	2				
Broken pieces and poorly cut units			15	Reasonably free	Reasonably free	
Mechanical damage	5	5	10			
Blowouts, cross pitted, plunger and pitter damage		10				
Obvious split pit or misshapen	5					
Severe blemishes (green-ripe type only)	0	0	0			

TABLE VI—LIMITS FOR DEFECTS IN GRADE C

	Whole per 50 olives	Pitted per 50 olives	Halved per 100 halved	Segmented per 255 g (9 oz.)	Sliced per 255 g (9 oz.)	Chopped per 255 g (9 oz.)	Broken Pitted per 255 g (9 oz.)
HEVM, HEM, or EVM	1	1	1	Fairly free	Fairly free	Fairly free	2
Minor and major stems inclusive	4	4	4				

TABLE VI—LIMITS FOR DEFECTS IN GRADE C—Continued

	Whole per 50 olives	Pitted per 50 olives	Halved per 100 halved	Segmented per 255 g (9 oz.)	Sliced per 255 g (9 oz.)	Chopped per 255 g (9 oz.)	Broken Pitted per 255 g (9 oz.)
Major stems	2	2	2	Fairly free	Fairly free	Fairly free	4
Minor, major blemishes, major, minor wrinkles.	No limit	No limit	No limit	Fairly free	Fairly free	Fairly free	No limit.
Provided:							
Major blemishes, major wrinkles do not exceed.	13	13	25				51 g[1]
Further Provided:							
Multilated, major blemish and major wrinkles do not exceed.	15	15	30				
Multilated do not exceed	5	5	10				No limit.
Broken pieces and poorly cut units.			25	Fairly free	Fairly free		
Mechanical damage	10	10	20				
Blowouts, cross pitted, plunger and pitter damaged.		15					
Obvious split pit or misshapen.	No limit						
Severe blemishes (green-ripe type only).	3	3	3	0	0	0	

[1] Major blemishes only.

[48 FR 41013, Sept. 13, 1983]

§ 52.3762 Character.

(a) *General.* The factor of character refers to the firmness, tenderness, and texture characteristics for the variety and type.

(b) *Grade A.* Canned ripe olives of whole, pitted, halved, segmented, sliced, and chopped styles that have a good character may be given a score of 27 to 30 points. ''Good character'' means that, for the type, the olives have a fleshy texture characteristic for the variety and size; that not less than 95 percent, by count, of whole, pitted and halved olives and by weight of other style olives are practically uniform in texture and are tender but not soft. The remaining 5 percent may be soft but not excessively soft.

(c) *Grade B.* If canned ripe olives of whole, pitted, halved, segmented, sliced and chopped styles have a reasonably good character, a score of 24 to 26 points may be given. Canned ripe olives that fall into this classification shall not be graded above U.S. Grade B regardless of the total score for the product (this is a limiting rule). ''Reasonably good character'' means that, for the type, the olives generally have a fleshy texture characteristic for the variety and size; that not less than 90 percent, by count, of whole, pitted and halved olives, and by weight of other style olives are practically uniform in texture and are tender but not soft. The 10 percent may be soft but not more than ½, or 5 percent, may be excessively soft.

(d) *Grade C.* If canned ripe olives of whole, pitted, halved, segmented, sliced, chopped and broken pitted styles have a fairly good character, a score of 21 to 23 points may be given. Canned ripe olives that fall into this classification shall not be graded above U.S. Grade C regardless of the total score for the product (this is a limiting rule). ''Fairly good character'' means that the olives generally have a fleshy texture characteristic for the variety and size; that not less than 80 percent, by count, of whole, pitted and halved olives and by weight of other style olives are practically uniform in texture and are tender but not soft. The remaining 20 percent may be soft but not more than ½, or 10 percent, may be excessively soft.

(e) *Substandard* (*SStd*). Canned ripe olives that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§ 52.3763 Determining the grade of a lot.

The grade of a lot of canned ripe olives covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (§§ 52.1 through 52.83).

§ 52.3764 Score sheet.

Number, size and kind of container	.....
Label (including size declaration)	.....
Container mark or identification	.....
Net weight (ounces)	.....
Vacuum (inches)	.....
Drained weight (ounces)	.....
Size	.....
Style	.....
Average count per pound (whole style)	.....

Factors		Score points	
Color	30	(A)	27–30
		(B)	24–26
		(C)	[1] 21–23
		(SStd.)	[1] 0–20
Absence of defects.	40	(A)	36–40
		(B)	[1] 32–35
		(C)	[1] 28–31
		(SStd.)	[1] 0–27
Character	30	(A)	27–30
		(B)	[1] 24–26
		(C)	[1] 21–23
		(SStd.)	[1] 0–20
Total Score	100		

Flavor: ( ) Good ( ) Reasonably good ( )	.....
Off	.....
Grade	.....

[1] Indicates limiting rule.