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:

<table>
<thead>
<tr>
<th>Designations</th>
<th>Brix measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Extra heavy sirup,” or “Extra heavily sweetened fruit juice(s) and water,” or “Extra heavily sweetened fruit juice(s).”</td>
<td>28° or more but not more than 45°.</td>
</tr>
<tr>
<td>“Heavy sirup,” or “Heavily sweetened fruit juice(s) and water,” or “Heavily sweetened fruit juice(s).”</td>
<td>22° or more but less than 28°.</td>
</tr>
<tr>
<td>“Light sirup,” or “Lightly sweetened fruit juice(s) and water,” or “Lightly sweetened fruit juice(s).”</td>
<td>18° or more but less than 22.</td>
</tr>
<tr>
<td>“Slightly sweetened water,” or “Slightly sweetened fruit juice(s) and water,” or “Slightly sweetened fruit juice(s).”</td>
<td>Less than 18°.</td>
</tr>
<tr>
<td>“In water”.................................................</td>
<td>Not applicable. Do.</td>
</tr>
<tr>
<td>“In fruit juice(s) and water.”.......................</td>
<td>Do.</td>
</tr>
<tr>
<td>“In fruit juice(s)”.......................................</td>
<td>Do.</td>
</tr>
</tbody>
</table>

(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.


**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.
§ 52.774

(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

<table>
<thead>
<tr>
<th>Container designation</th>
<th>Packed in water or cherry juice (ounces)</th>
<th>Packed in any sirup or slightly sweetened water (ounces)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LL</td>
<td>Xd</td>
</tr>
<tr>
<td>No. 303 (303 × 406)</td>
<td>10.7</td>
<td>11.0</td>
</tr>
<tr>
<td>No. 303 Cylinder (303 × 509)</td>
<td>14.0</td>
<td>14.4</td>
</tr>
<tr>
<td>No. 2 (307 × 409)</td>
<td>13.1</td>
<td>13.5</td>
</tr>
<tr>
<td>No. 10 (603 × 700)</td>
<td>71.2</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Table II—Single Sampling Plans and Acceptance Numbers

<table>
<thead>
<tr>
<th>Sample Size (No. of sample containers)</th>
<th>Acceptance numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

(2) Definitions.

Subgroup A group of sample containers representing a portion of a sample.

\( \overline{X}_m \) — 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

<table>
<thead>
<tr>
<th>Container designation</th>
<th>( X_m )</th>
<th>LWL</th>
<th>LRL</th>
<th>LWL</th>
<th>LRL</th>
<th>R’</th>
<th>( R_{max} )</th>
<th>Sampling allowance code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 303</td>
<td>12.9</td>
<td>12.6</td>
<td>12.4</td>
<td>12.2</td>
<td>11.8</td>
<td>0.80</td>
<td>1.70</td>
<td>F</td>
</tr>
</tbody>
</table>
TABLE III—RECOMMENDED FILL WEIGHT VALUES FOR CANNED RED TART PITTED CHERRIES—Continued

<table>
<thead>
<tr>
<th>Container designation</th>
<th>Fill weight values in ounces</th>
<th>$X'_{\min}$</th>
<th>$LWL_{\min}$</th>
<th>$LWL$</th>
<th>$LRL$</th>
<th>$R'$</th>
<th>$R'_{\max}$</th>
<th>Sampling allowance code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 303 Cylinder</td>
<td></td>
<td>16.8</td>
<td>16.4</td>
<td>16.2</td>
<td>15.9</td>
<td>15.4</td>
<td>1.10</td>
<td>2.20</td>
</tr>
<tr>
<td>No. 2</td>
<td></td>
<td>15.8</td>
<td>15.4</td>
<td>15.2</td>
<td>14.9</td>
<td>14.4</td>
<td>1.10</td>
<td>2.20</td>
</tr>
<tr>
<td>No. 10</td>
<td></td>
<td>86.7</td>
<td>85.9</td>
<td>85.5</td>
<td>85.0</td>
<td>84.1</td>
<td>2.00</td>
<td>4.20</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Factors</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>20</td>
</tr>
<tr>
<td>Freedom from pits</td>
<td>20</td>
</tr>
<tr>
<td>Defects</td>
<td>30</td>
</tr>
<tr>
<td>Character</td>
<td>30</td>
</tr>
</tbody>
</table>

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...