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for infested wheat, rye, and triticale are defined according to sampling designations as follows:

- (1) Representative sample. The representative sample consists of the work portion, and the file sample if needed and when available. These grains will be considered infested if the representative sample (other than shiplots) contains two or more live weevils, or one live weevil and one or more other live insects injurious to stored grain, or two or more live insects injurious to stored grain.
- (2) Lot as a whole (stationary). The lot as a whole is considered infested when two or more live weevils, or one live weevil and one or more other live insects injurious to stored grain, or two or more other live insects injurious to stored grain are found in, on, or about the lot (excluding submitted samples and shiplots).
- (3) Sample as a whole (continuous loading/unloading of shiplots and bargelots). The minimum sample size for bargelots and shiplots is 500 grams per each 2,000 bushels of grain. The sample as a whole is considered infested when a component (as defined in FGIS instructions) contains two or more live weevils, or one live weevil and one or more other live insects injurious to stored grain, or two or more other live insects injurious to stored grain.
- (b) Infested barley, canola, corn, oats, sorghum, soybeans, sunflower seed, and mixed grain. Tolerances for live insects responsible for infested barley, canola, corn, oats, sorghum, soybeans, sunflower seed, and mixed grain are defined according to sampling designations as follows:
- (1) Representative sample. The representative sample consists of the work portion, and the file sample if needed and when available. These grains will be considered infested if the representative sample (other than shiplots) contains two or more live weevils, or one live weevil and five or more other live insects injurious to stored grain, or ten or more other live insects injurious to stored grain.
- (2) Lot as a whole (stationary). The lot as a whole is considered infested when two or more live weevils, or one live weevil and five or more other live insects injurious to stored grain, or ten

or more other live insects injurious to stored grain are found in, on, or about the lot (excluding submitted samples and shiplots).

(3) Sample as a whole (continuous loading/unloading of shiplots and bargelots). The minimum sample for shiplots and bargelots is 500 grams per each 2,000 bushels of grain. The sample as a whole is considered infested when a component (as defined in FGIS instructions) contains two or more live weevils, or one live weevil and five or more other live insects injurious to stored grain, or ten or more other live insects injurious to stored grain.

[52 FR 24441, June 30, 1987, as amended at 57 FR 3274, Jan. 29, 1992]

## §810.108 Special grade designations.

Special grade designations are shown as prescribed in \$810.106. Multiple special grade designations will be listed in alphabetical order. In the case of treated wheat, the official certificate shall show whether the wheat has been scoured, limed, washed, sulfured, or otherwise treated.

# Subpart B—United States Standards for Barley

TERMS DEFINED

# §810.201 Definition of barley.

Grain that, before the removal of dockage, consists of 50 percent or more of whole kernels of cultivated barley (Hordeum vulgare L.) and not more than 25 percent of other grains for which standards have been established under the United States Grain Standards Act. The term "barley" as used in these standards does not include hull-less barley or black barley.

#### §810.202 Definition of other terms.

- (a)  ${\it Black\ barley}.$  Barley with black hulls.
- (b) Broken kernels. Barley with more than  $\frac{1}{4}$  of the kernel removed.
- (c) Classes. There are two classes of barley: Malting barley and Barley.
- (1) Malting barley. Barley of a sixrowed or two-rowed malting type. The class Malting barley is divided into the following three subclasses:

- (i) Six-rowed Malting barley. Barley that has a minimum of 95.0 percent of a six-rowed suitable malting type that has 90.0 percent or more of kernels with white aleurone layers that contains not more than 1.9 percent injured-by-frost kernels, 0.4 percent frost-damaged kernels, 0.2 percent injured-by-heat kernels, and 0.1 percent heat-damaged kernels. Six-rowed Malting barley shall not be infested, blighted, ergoty, garlicky, or smutty as defined in §810.107(b) and §810.206.
- (ii) Six-rowed Blue Malting barley. Barley that has a minimum of 95.0 percent of a six-rowed suitable malting type that has 90.0 percent or more of kernels with blue aleurone layers that contains not more than 1.9 percent injured-byfrost kernels, 0.4 percent frost-damaged kernels, 0.2 percent injured-by-heat kernels, and 0.1 percent heat-damaged kernels. Six-rowed Blue Malting barley shall not be infested, blighted, ergoty, garlicky, or smutty as defined in §810.107(b) and §810.206.
- (iii) Two-rowed Malting barley. Barley that has a minimum of 95.0 percent of a two-rowed suitable malting type that contains not more than 1.9 percent injured-by-frost kernels, 0.4 percent frost-damaged kernels, 0.2 percent injured-by-heat kernels, 0.1 percent heat-damaged kernels, 1.9 percent injured-by-mold kernels, and 0.4 percent mold-damaged kernels. Two-rowed Malting barley shall not be infested, blighted, ergoty, garlicky, or smutty as defined in §810.107(b) and §810.206.
- (2) Barley. Any barley of a six-rowed or two-rowed type. The class Barley is divided into the following three sub-classes:
- (i) Six-rowed barley. Any Six-rowed barley that contains not more than 10.0 percent of two-rowed varieties.
- (ii) *Two-rowed barley*. Any Two-rowed barley with white hulls that contains not more than 10.0 percent of six-rowed varieties.
- (iii) Barley. Any barley that does not meet the requirements for the subclasses Six-rowed barley or Two-rowed barley.
- (d) Damaged kernels. Kernels, pieces of barley kernels, other grains, and wild oats that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-

- damaged, injured-by-heat, insectbored, mold-damaged, sprout-damaged, or otherwise materially damaged.
- (e) Dockage. All matter other than barley that can be removed from the original sample by use of an approved device according to procedures prescribed in FGIS instructions. Also, underdeveloped, shriveled, and small pieces of barley kernels removed in properly separating the material other than barley and that cannot be recovered by properly rescreening or recleaning.
- (f) Foreign material. All matter other than barley, other grains, and wild oats that remains in the sample after removal of dockage.
- (g) Frost-damaged kernels. Kernels, pieces of barley kernels, other grains, and wild oats that are badly shrunken and distinctly discolored black or brown by frost.
- (h) Germ-damaged kernels. Kernels, pieces of barley kernels, other grains, and wild oats that have dead or discolored germ ends.
- (i) Heat-damaged kernels. Kernels, pieces of barley kernels, other grains, and wild oats that are materially discolored and damaged by heat.
- (j) Injured-by-frost kernels. Kernels and pieces of barley kernels that are distinctly indented, immature or shrunken in appearance or that are light green in color as a result of frost before maturity.
- (k) *Injured-by-heat kernels*. Kernels, pieces of barley kernels, other grains, and wild oats that are slightly discolored as a result of heat.
- (1) *Injured-by-mold kernels*. Kernels, pieces of barley kernels containing slight evidence of mold.
- (m) Mold-damaged kernels. Kernels, pieces of barley kernels, other grains, and wild oats that are weathered and contain considerable evidence of mold.
- (n) Other grains. Black barley, corn, cultivated buckwheat, einkorn, emmer, flaxseed, guar, hull-less barley, nongrain sorghum, oats, Polish wheat, popcorn, poulard wheat, rice, rye, safflower, sorghum, soybeans, spelt, sunflower seed, sweet corn, triticale, and wheat.
- (o) Plump barley. Barley that remains on top of a  $\%4 \times 34$  slotted-hole sieve

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after sieving according to procedures prescribed in FGIS instructions.

- (p) Sieves. (1)  $^{5}$ %4  $\times$   $^{3}$ 4 slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0781 ( $^{5}$ %4) inch by 0.750 ( $^{3}$ 4) inch.
- (2) 5–½  $\%_4 \times \%_4$  slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0895 (5–½/64) inch by 0.750 (¾) inch.
- (3)  $\%_{64}\times 3/4$  slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0937 (%4) inch by 0.750 (3/4) inch.
- (q) Skinned and broken kernels. Barley kernels that have one-third or more of the hull removed, or that the hull is loose or missing over the germ, or broken kernels, or whole kernels that have a part or all of the germ missing.
- (r) Sound barley. Kernels and pieces of barley kernels that are not damaged, as defined under (d) of this section.
- (s) Suitable malting type. Varieties of malting barley that are recommended by the American Malting Barley Association and other malting type(s) used by the malting and brewing industry. The varieties are listed in GIPSAs instructions.
- (t) Thin barley. Thin barley shall be defined for the appropriate class as follows:

- (1) Malting barley. Six-rowed Malting barley that passes through a  $^{5}$ /s4 ×  $^{3}$ /4 slotted-hole sieve and Two-rowed Malting barley which passes through a  $^{5.5}$ /s4× $^{3}$ /4 slotted-hole sieve in accordance with procedures prescribed in GIPSAs instructions.
- (2) Barley. Six-rowed barley, Two-rowed barley, or Barley that passes through a \(^{5}\_{4}\times^{3}\_{4}\) slotted-hole sieve in accordance with procedures prescribed in GIPSAs instructions.
- (u) Wild oats. Seeds of Avena fatua L. and A. sterilis L.

[52 FR 24418, June 30, 1987; 52 FR 28534, July 31, 1987, as amended at 61 FR 18491, Apr. 26, 1996]

PRINCIPLES GOVERNING THE APPLICATION OF STANDARDS

#### §810.203 Basis of determination.

All other determinations. Each determination of heat-damaged kernels, injured-by-heat kernels, and white or blue aleurone layers in Six-rowed barley is made on pearled, dockage-free barley. Other determinations not specifically provided for under the General Provisions are made on the basis of the grain when free from dockage, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from dockage.

# GRADES AND GRADE REQUIREMENTS

§810.204 Grades and grade requirements for Six-rowed Malting barley and Six-rowed Blue Malting barley.

Grade	Minimum limits of—			Maximum limits of—				
	Test weight per bushel (pounds)	Suitable malting types (percent)	Sound barley <sup>1</sup> (percent)	Damaged kernels <sup>1</sup> (percent)	Foreign material (percent)	Other grains (percent)	Skinned and bro- ken ker- nels (per- cent)	Thin bar- ley (per- cent)
U.S. No. 1	47.0	95.0	97.0	2.0	0.5	2.0	4.0	7.0
U.S. No. 2	45.0	95.0	94.0	3.0	1.0	3.0	6.0	10.0
U.S. No. 3	43.0	95.0	90.0	4.0	2.0	5.0	8.0	15.0
U.S. No. 4	43.0	95.0	87.0	5.0	3.0	5.0	10.0	15.0

¹ Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels or considered against sound barley. NOTES: Malting barley shall not be infested in accordance with §810.107(b) and shall not contain any special grades as defined in §810.206. Six-rowed Malting barley varieties not meeting the requirements of this section shall be graded in accordance with standards established for the class Barley.

[61 FR 18492, Apr. 26, 1996]