- (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 $\%_4 \times 3_4$ slotted-hole sieve after sieving according to procedures prescribed in FGIS instructions.
- (p) Sieves. (1) $\frac{5}{64} \times \frac{3}{4}$ slotted-hole sieve. A metal sieve 0.032 inch thick with slotted perforations 0.0781 ($\frac{5}{64}$) inch by 0.750 ($\frac{3}{4}$) 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) %4 × 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 /64 \times 3 /4 slotted-hole sieve and Two-rowed Malting barley which passes through a 5 - 5 /64 \times 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.

§810.204

GRADES AND GRADE REQUIREMENTS

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

	Minimum limits of—			Maximum limits of—					
Grade	Test weight per bushel (pounds)	Suitable malting types (percent)	Sound barley ¹ (percent)	Damaged kernels ¹ (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 and Six-rowed Blue 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]

§810.205 Grades and grade requirements for Two-rowed Malting barley.

	Mi	nimum limits of	<u> </u>	Maximum limits of—			
Grade	Test weight per bushel (pounds)	Suitable malting types (per- cent)	Sound bar- ley¹ (per- cent)	Wild oats (percent)	Foreign ma- terial (per- cent)	Skinned and broken ker- nels (per- cent)	Thin barley (percent)
U.S. No. 1	50.0	97.0	98.0	1.0	0.5	5.0	5.0
U.S. No. 2	48.0	97.0	98.0	1.0	1.0	7.0	7.0
U.S. No. 3	48.0	95.0	96.0	2.0	2.0	10.0	10.0
U.S. No. 4	48.0	95.0	93.0	3.0	3.0	10.0	10.0

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. Two-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]

§810.206 Grades and grade requirements for barley.

	Minimum limits of—		Maximum Limits of—					
Grade	Test weight per bushel (pounds)	Sound bar- ley (percent)	Damaged kernels ¹ (percent)	Heat dam- aged ker- nels (per- cent)	Foreign ma- terial (per- cent)	Broken ker- nels (per- cent)	Thin barley (percent)	
U.S. No. 1	47.0	97.0	2.0	0.2	1.0	4.0	10.0	
U.S. No. 2	45.0	94.0	4.0	0.3	2.0	8.0	15.0	
U.S. No. 3	43.0	90.0	6.0	0.5	3.0	12.0	25.0	
U.S. No. 4	40.0	85.0	8.0	1.0	4.0	18.0	35.0	
U.S. No. 5	36.0	75.0	10.0	3.0	5.0	28.0	75.0	

U.S. Sample Grade: U.S. Sample grade shall be barley that:

[61 FR 18492, Apr. 26, 1996]

U.S. Sample grade shall be barley that:

(a) Does not meet the requirements for the grades 1, 2, 3, 4, or 5; or

(b) Contains 8 or more stones or any number of stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more caster beans (*Ricinus communis* L.), 4 or more particles of unknown foreign substance(s) or commonly recognized harmful or toxic substance(s), 8 or more cock-lebur (*Xanthium* spp.) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 1½ to 1½ quarts of barley; or

(c) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or

(d) Is heating or otherwise of distinctly low quality.

¹ Includes heat-damaged kernels. Injured-by-frost kernels and injured-by-mold kernels are not considered damaged kernels.