

Subpart F -- United States Standards for Mixed Grain

Terms Defined

810.801 Definition of mixed grain

Any mixture of grains for which standards have been established under the United States Grain Standards Act, provided that such mixture does not come within the requirements of any of the standards for such grains; and that such mixture consists of 50 percent or more of whole kernels of grain and/or whole or broken soybeans which will not pass through a 5/64 triangular-hole sieve and/or whole flaxseed that passes through such a sieve after sieving according to procedures prescribed in FGIS instructions.

810.802 Definition of other terms

- (a) **Damaged kernels.** Kernels and pieces of grain kernels for which standards have been established under the Act that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, germ-damaged, heat-damaged, insect-bored, mold-damaged, sprout-damaged, or otherwise materially damaged.
- (b) **Foreign material and fines.** All matter other than whole flaxseed that passes through a 5/64 triangular-hole sieve and all matter other than grains for which standards have been established under the Act that remains in the sieved sample.
- (c) **Grades.** U.S. Mixed Grain, or U.S. Sample grade Mixed Grain, and special grades.
- (d) **Heat-damaged kernels.** Kernels and pieces of grain kernels for which standards have been established under the Act that are materially discolored and damaged by heat.
- (e) **Sieve. 5/64 triangular-hole sieve.** A metal sieve 0.032 inch thick with equilateral triangular perforations the inscribed circles of which are 0.0781 (5/64) inch in diameter.

Principles of Governing the Application of Standards

810.803 Basis of determination

Each determination of damaged and heat-damaged kernels and the percentage of each kind of grain in the mixture is made on the basis of the sample after removal of foreign material and fines. Other determinations not specifically provided for under the General Provisions are made on the basis of the grain as a whole, except the determination of odor is made on either the basis of the grain as a whole or the grain when free from foreign material and fines.

Grades and Grade Requirements

810.804 Grades and grade requirements for mixed grain

- (a) **U.S. Mixed Grain (grade).** Mixed grain with not more than 15.0 percent of damaged kernels and not more than 3.0 percent of heat-damaged kernels and that otherwise does not meet the requirements for the grade U.S. Sample grade Mixed Grain.

(b) **U.S. Sample grade Mixed Grain.** Mixed grain that:

- (1) Does not meet the requirements for the grade U.S. Mixed Grain; or
- (2) Contains more than 16.0 percent moisture; or
- (3) Contains 8 or more stones that have an aggregate weight in excess of 0.2 percent of the sample weight; 2 or more pieces of glass; 3 or more *Crotalaria* (*Crotalaria* spp.); 2 or more castor beans (*Ricinus communis* L.); 8 or more cockleburrs (*Xanthium* spp.) or similar seeds singly or in combination; 4 or more pieces of an unknown foreign substance(s) or a recognized harmful or toxic substance(s); 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth per 1,000 grams of mixed grain; or
- (4) Is musty, sour, or heating; or
- (5) Has any commercially objectionable foreign odor except smut or garlic; or
- (6) Is otherwise of distinctly low quality.

Special Grades and Special Grade Requirements

810.805 Special grades and special grade requirements

(a) **Blighted mixed grain.** Mixed grain in which barley predominates and that contains more than 4.0 percent of fungus-damaged and/or mold-damaged barley kernels.

(b) **Ergoty mixed grain.**

- (1) Mixed grain in which rye or wheat predominates and that contains more than 0.30 percent ergot, or
- (2) Any other mixed grain that contains more than 0.10 percent ergot.

(c) **Garlicky mixed grain.**

- (1) Mixed grain in which wheat, rye, or triticale predominates and that contains 2 or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets in 1,000 grams of mixed grain; or
- (2) Any other mixed grain that contains 4 or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets in 500 grams of mixed grain.

(d) **Smutty mixed grain.**

- (1) Mixed grain in which rye, triticale, or wheat predominates and that contains 15 or more average size smut balls or an equivalent quantity of smut spores in 250 grams of mixed grain, or
- (2) Any other mixed grain that has the kernels covered with smut spores to give a smutty appearance in mass or that contains more than 0.2 percent smut balls.

(e) **Treated mixed grain.** Mixed grain that has been scoured, limed, washed, sulfured, or treated in such a manner that its true quality is not reflected by the grade designation U.S. Mixed Grain or U.S. Sample grade Mixed Grain.

