

U.S. Grades and Standards for Sunflower

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Definition of Sunflower Seed

Grain that, before the removal of foreign material, consists of 50 percent or more of cultivated sunflower seed (*Helianthus annuus* L.) and not more than 10 percent of other grains for which standards have been established under the U.S. Grain Standards Act.

Definition of Other Terms

Cultivated sunflower seed - Sunflower seed grown for oil content. The term seed in this and other definitions related to sunflower seed refers to both the kernel and hull, which is a fruit or achene.

Damaged sunflower seed - Seed and pieces of sunflower seed that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, mold-damaged, sprout-damaged or otherwise materially damaged.

Dehulled seed - Sunflower seed that has the hull completely removed from the sunflower kernel.

Foreign material - All matter other than whole sunflower seeds containing kernels that can be removed from the original sample by use of an approved device and by handpicking a portion of the sample according to procedures prescribed in the USDA's Federal Grain Inspection Service instructions.

Heat-damaged sunflower seed - Seed and pieces of sunflower seed that are materially discolored and damaged by heat.

Hull (husk) - The ovary wall of the sunflower seeds.

Kernel - The interior contents of the sunflower seed that are surrounded by the hull.

Basis of Determination

Each determination of heat-damaged kernels, damaged kernels, test weight per bushel and dehulled seed is made on the basis of the grain when free from foreign material. Other determinations not specifically provided for in 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.

Table 20 lists the U.S. grade requirements for sunflower according to the Federal Grain and Inspection Service. These requirements became effective Sept. 1, 1984. The table lists the minimum limit for test weight and the maximum for damaged and dehulled seed. U.S. grades for both oilseed and nonoilseed classes of sunflower are determined with the requirements listed below.

Table 20. Grade and grade requirements for sunflower.

Grade	Minimum test weight per bushel (pounds)	Maximum limits of damaged sunflower seed		
		Heat damage	Total	Dehulled seed
U.S. No. 1	25.0	0.5	5.0	5.0
U.S. No. 2	25.0	1.0	10.0	5.0

U.S. Sample grade - U.S. sample grade shall be sunflower seed that:

- (1) Does not meet the requirements for the grades U.S. Nos. 1 or 2; or
- (2) In a 600-gram sample, contains eight or more stones that have aggregate weight in excess of 0.20 percent of the sample weight, two or more pieces of glass, three or more crotalaria seeds (*Crotalaria* spp.), two or more castor beans (*Ricinus Communis*), four or more particles of an unknown substance(s), or 10 or more rodent pellets, bird droppings or an equivalent quantity of other animal filth; or
- (3) Has a musty, sour or commercially objectionable foreign odor; or
- (4) Is heating or otherwise of distinctly low quality.

Source: Federal Grain and Inspection Service-USDA