

4.2 GRADES AND GRADE REQUIREMENTS

Corn is divided into three classes based on color: Yellow corn, White corn, and Mixed corn. Each class is divided into five U.S. numerical grades and U.S. Sample Grade. Special grades are provided to emphasize special qualities or conditions affecting the value and are added to and made a part of the grade designation. They do not affect the numerical or sample grade designation.

TABLE NO. 1 - GRADES AND GRADE REQUIREMENTS

CORN				
Grade	Minimum Limits of -	Maximum Limits of -		
	Test weight per bushel (pounds)	Heat-Damaged kernels (percent)	Damaged kernels total (percent)	Broken Corn and Foreign material (percent)
U.S. No. 1	56.0	0.1	3.0	2.0
U.S. No. 2	54.0	0.2	5.0	3.0
U.S. No. 3	52.0	0.5	7.0	4.0
U.S. No. 4	49.0	1.0	10.0	5.0
U.S. No. 5	46.0	3.0	15.0	7.0

U.S. Sample Grade:
 U.S. Sample Grade is corn that:

- (a) Does not meet the requirements for grades U.S. No.1, 2, 3, 4, or 5; or
- (b) Contains stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cockleburs (*Xanthium* spp.) or similar seeds singly or in combination, or animal filth in excess of 0.20 percent in 1,000 grams; or
- (c) Has a musty, sour, or commercially objectionable foreign odor; or
- (d) Is heating or otherwise of distinctly low quality.

TABLE NO. 2

BASIS OF DETERMINATION		
Lot as a Whole	Factors Determined Before the Removal of Broken Corn and Foreign Material	Factors Determined After the Removal of Broken Corn and Foreign Material
Distinctly low quality Heating Infested Odor	Distinctly low quality Heating Infested Kind of Grain Moisture Odor Stones Test Weight U.S. Sample Grade factors	Class Damaged kernels Flint corn Flint and dent corn Heat-damaged kernels Odor Waxy

The following sections of this chapter are arranged in a sequence typically followed in the inspection and grading of corn.