

Subpart C -- United States Standards for Canola

Terms Defined

810.30 Definition of canola.

Seeds of the genus *Brassica* from which the oil shall contain less than 2 percent erucic acid in its fatty acid profile and the solid component shall contain less than 30.0 micromoles of any one or any mixture of 3-butenyl glucosinolate, 4-pentenyl glucosinolate, 2-hydroxy-3-butenyl, or 2-hydroxy-4-pentenyl glucosinolate, per gram of air-dried, oil free solid. Before the removal of dockage, the seed shall contain not more than 10.0 percent of other grains for which standards have been established under the United States Grain Standards Act.

810.30 Definition of other terms.

(a) **Conspicuous admixture.** All matter other than canola including, but not limited to, ergot, sclerotinia, and stones, which is conspicuous and readily distinguishable from canola and which remains in the sample after the removal of machine separated dockage. Conspicuous admixture is added to machine separated dockage in the computation of total dockage.

(b) **Damaged kernels.** Canola and pieces of canola that are heat-damaged, sprout-damaged, mold-damaged, distinctly green-damaged, frost-damaged, rimed-damaged, or otherwise materially damaged.

(c) **Distinctly green kernels.** Canola and pieces of canola which, after being crushed, exhibit a distinctly green color.

(d) **Dockage.** All matter other than canola 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 canola kernels that cannot be recovered by properly rescreening or recleaning. Machine separated dockage is added to conspicuous admixture in the computation of total dockage.

(e) **Ergot.** Sclerotia (sclerotium, sing.) of the fungus, *Claviceps* species, which are associated with some seeds other than canola where the fungal organism has replaced the seed.

(f) **Heat-damaged kernels.** Canola and pieces of canola which, after being crushed, exhibit that they are discolored and damaged by heat.

(g) **Inconspicuous admixture.** Any seed which is difficult to distinguish from canola. This includes, but is not limited to, common wild mustard (*Brassica kaber* and *B. juncea*), domestic brown mustard (*Brassica juncea*), yellow mustard (*B. hirta*), and seed other than the mustard group.

(h) **Sclerotia (sclerotium, sing.)** Dark colored or black resting bodies of the fungi *Sclerotinia* and *Claviceps*.

(i) **Sclerotinia.** Genus name which includes the fungus *Sclerotinia sclerotiorum* which produces sclerotia. Canola is only infrequently infected, and the sclerotia, unlike sclerotia of ergot, are

usually associated within the stem of the plants.

Principles Governing the Application of Standards

810.30 Basis of determination

Each determination of conspicuous admixture, ergot, sclerotinia, stones, damaged kernels, heat-damaged kernels, distinctly green kernels, and inconspicuous admixture is made on the basis of the sample when free from dockage. Other determinations not specifically provided for under the General Provisions are made on the basis of the sample as a whole, except the determination of odor is made on either the basis of the sample as a whole or the sample when free from dockage. The content of glucosinolates and erucic acid is determined on the basis of the sample according to procedures prescribed in FGIS instructions.

Canola Grades and Grade Requirements

Grading Factors	U.S. No. 1	U.S. No. 2	U.S. No. 3
	Maximum percent limits		
DAMAGED KERNELS			
Heat damaged	0.1	0.5	2.0
Distinctly green	2.0	6.0	20.0
Total	3.0	10.0	20.0
CONSPICUOUS ADMIXTURE			
Ergot	0.05	0.05	0.05
Sclerotinia	0.05	0.10	0.15
Stones	0.05	0.05	0.05
Total	1.0	1.5	2.0
INCONSPICUOUS ADMIXTURE	5.0	5.0	5.0
	Maximum count limits		
OTHER MATERIAL			
Animal Filth	3	3	3
Glass	0	0	0
Unknown foreign substance	1	1	1

U.S. Sample grade is canola that:

- (a) Does not meet the requirements for U.S. Nos. 1, 2, or 3; or
- (b) Has a musty, sour, or commercially objectionable foreign odor; or
- (c) Is heating or otherwise of distinctly low quality.

Special Grades and Special Grade Requirements

810.305 Special grades and special grade requirement

Garlicky canola. Canola that contains more than two green garlic bulblets or an equivalent quantity of dry or partly dry bulblets in approximately a 500-gram portion.

Nongrade Requirements

810.306 Nongrade requirement

Glucosinolates. Content of glucosinolates in canola is determined according to procedures prescribed in FGIS instructions.