

Table 3. Canola (Canada) Primary Grade Determinants^a

Grade Name	Standard of Quality		Admixtures of Foreign Material						Maximum Damage			Standard of Cleanliness
	Variety	Degree of Soundness	Stones	Ergot	Sclerotia	Insect Excreta	Total Conspicuous Admixtures	Inconspicuous Admixture	Heated	Distinctly Green	Total Damage	
Canola No. 1 Canada	Any variety of canola equal to acceptance reference varieties	Reasonably well matured, sweet, of good natural colour	0.05%	0.05%	0.1%	0.1%	1.0%	5.0%	@ 0.1%	2.0%	3.0%	Commercially pure seed; may contain not more than 1.0% of other seeds that are conspicuous and that are not readily separable from canola, to be assessed as dockage.
Canola No. 2 Canada	Any variety of canola equal to acceptable reference varieties	Fairly well matured, sweet, of reasonably good natural colour	0.05%	0.05%	0.2%	0.2%	1.5%	5.0%	@ 0.5%	6.0%	10.0%	Commercially pure seed; may contain not more than 1.5% of other seeds that are conspicuous and that are not readily separable from canola, to be assessed as dockage.
Canola No. 3 Canada	Any variety of canola	May have the natural odour associated with low-quality seed, but not distinctly sour, musty, rancid, nor having any odour that would indicate serious deterioration	0.05%	0.05%	0.3%	0.3%	2.0%	5.0%	2.0%	20.0%	20.0%	Commercially pure seed; may contain not more than 2.0% of other seeds that are conspicuous and that are not readily separable from canola, to be assessed as dockage.
If specifications for No. 3 Canada are not met grade (based on specific damage):			Up to 2.5%: "Canola Sample Canada, Account Stones" Over 2.5%: "Canola Sample Salvage"	"Canola, Sample Canada, Account Ergot"	"Canola, Sample Canada, Account Admixture"	"Canola, Sample Canada, Account Excreta"	"Canola, Sample Canada, Account Admixture"	Up to 50.0%: "Canola, Sample Canada, Account Admixture" Over 50.0%: "Refuse Screenings"	"Canola, Sample Canada, Account Heated"	"Canola, Sample Canada, Account Damaged"	"Canola, Sample Canada, Account Damaged"	"Canola, Sample Canada Account Admixture"

^a Official Grain Grading Guide, 1991 Edition, rev-1993, Canadian Grain Commission

Grading of Canola

Canola was designated as an official grade under the Canada Seeds Act on August 1, 1987, and canola seed was defined in the Seeds Regulations on January 29, 1987.

Strict grading standards for canola are established and maintained by the Canadian Grain Commission. There are four grades of canola ranging from the most superior grade, Canada No. 1 Canola, through to a sample grade. The primary grade determinants are outlined in Table 3.

Canadian Feeds Act

There are two methods of obtaining meal from canola: prepress solvent extraction and direct solvent extraction. In order to control and regulate the ingredients and labelling of canola meal, the Canadian Feeds Act has outlined standards for meal derived from both processes (Table 4).

Trading Rules for Canola

Both the Canadian canola industry and the American canola industry has designed trading rules to act as guidelines for domestic and export trading rules in oil and meal markets.

Canada

The Canadian Oilseed Processors Association has developed a series of trading rules for the purchase and sale of canola oil and canola meal. The following trading rules serve as a guide only for transactions and the parties to such transactions are free to adopt or modify the terms and conditions:

- Trading Rules for Canola Oil
Canadian Domestic Sales Canola Oil
U.S.A. Sales Canola Oil
- Trading Rules for Canola Meal
Canadian Domestic Sales Bulk Canola Meal
Export Sales Canola Meal Pellets

Unites States of America

As of July 1, 1990, the National Institute of Oilseed Products (N.I.O.P.) included guidelines and specifications for canola seed, meal and method of analysis in their domestic trading rules. The quality specifications for canola oil have been outlined under the same section as low erucic rapeseed oil (LEAR) (Table 5).

Table 4. Canadian Feeds Regulations for Canola Meal^a

5.3.3 Canola meal prepress solvent extracted low erucic acid low glucosinolates (or Canola meal) (IFN 5-06-145) consists of the meal obtained after the removal of most of the oil, by a prepress solvent extraction process, from whole seeds of the species *Brassica napus* or *Brassica campestris* the oil component of which seed contains less than 2 per cent erucic acid and the solid component of which seed contains less than 30 micromoles of any one, or any mixture of two or more, of the following glucosinolates per gram of air-dried, oil-free solid, as measured by the Gas liquid Chromatographic Method of the Canadian Grain Commission:

- a) 3-butenyl glucosinolate;
- b) 4-pentenyl glucosinolate;
- c) 2-hydroxy-3-butenyl glucosinolate: and
- d) 2-hydroxy-4-pentenyl glucosinolate.

This product shall contain less than 30 micromoles of glucosinolates per gram of dried meal. It shall be labelled with guarantees for minimum crude protein, maximum crude fat, maximum crude fibre, maximum moisture, maximum erucic acid and maximum glucosinolates.

5.3.4 Canola meal solvent extracted low erucic acid low glucosinolates (or Canola meal) (IFN 5-06-146) consists of the meal obtained after the removal of most of the oil, by a direct solvent extraction process, from whole seeds of the species *Brassica napus* or *Brassica campestris* the oil component of which seed contains less than 2 per cent erucic acid and the solid component of which seed contains less than 30 micromoles of any one, or any mixture of two or more, of the following glucosinolates per gram of air-dried, oil-free solid, as measured by the Gas-Liquid Chromatographic Method of the Canadian Grain Commission:

- a) 3-butenyl glucosinolate;
- b) 4-pentenyl glucosinolate;
- c) 2-hydroxy-3-butenyl glucosinolate: and
- d) 2-hydroxy-4-pentenyl glucosinolate.

This product shall contain less than 30 micromoles of glucosinolates per gram of dried meal. It shall be labelled with guarantees for minimum crude protein, maximum crude fat, maximum crude fiber, maximum moisture, maximum erucic acid and maximum glucosinolates.

Table 5. Rule 6.17 - Low Erucic Acid Rapeseed Oil (Lear/Canola)^a**Quality Specifications****1. CRUDE**

FFA (as Oleic Acid):	1% Maximum
M & I:	0.5% Maximum
Flash Point:	150°C Minimum
Refined and Bleached Color: (AOCS Method Cc 13B-45)	1.5 red/15 Yellow Maximum
Chlorophyll:	30 PPM Maximum
Sulfur:	10 PPM Maximum
Erucic Acid (as per cent of MASS):	2% Maximum

2. CRUDE DEGUMMED

FFA (as Oleic Acid):	1% Maximum
M & I:	0.3% Maximum
Flash Point:	150°C Minimum
Refined and Bleached Color: (AOCS Method Cc 13B-45)	1.5 red/15 Yellow Maximum
Chlorophyll:	30 PPM Maximum
Sulfur:	10 PPM Maximum
Phosphorous:	200 PPM Maximum
Erucic Acid (as per cent of MASS):	2% Maximum

3. CRUDE SUPER DEGUMMED

FFA (as Oleic Acid):	1% Maximum
M & I:	0.3% Maximum
Flash Point:	150°C Minimum
Refined and Bleached Color: (AOCS Method Cc 13B-45)	1.5 red/15 Yellow Maximum
Chlorophyll:	30 PPM Maximum
Sulfur:	8 PPM Maximum
Phosphorous:	50 PPM Maximum
Erucic Acid (as per cent of MASS):	2% Maximum

^a N.I.O.P. Trading Rules 1993-1994, Chapter 6, p. 23