

10. Canola and rapeseed

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Classes and varieties

Canola and rapeseed are classes of the same botanical family.

This chapter describes dockage and grading procedures for canola and rapeseed. Canola has been used in the examples of grade names. If a sample of rapeseed is submitted for inspection, replace canola with rapeseed.

- ▲ **Important:** Ensure you use the correct grain code. Codes are different for canola and rapeseed.

Canola

The term canola applies to varieties that meet the canola standards for low levels of erucic acid and glucosinolates. Production of canola varieties is widespread.

Rapeseed

Rapeseed varieties are produced in small volumes, usually under contract. Shipments and submitted samples of rapeseed must be clearly identified as rapeseed.

- ▲ **Important:** Canola and rapeseed may be visually indistinguishable. However, their end uses are quite different. If you are not sure if the sample is canola or rapeseed, send the sample to the Chief Grain Inspector.

Determination of dockage

Definitions

Dockage is assessed and recorded to the nearest 0.1%.

Dockage is defined under the *Canada Grain Act* as “any material intermixed with a parcel of grain, other than kernels of grain of a standard of quality fixed by or under this Act for a grade of that grain, that must and can be separated from the parcel of grain before that grade can be assigned to the grain”. Dockage is removed by following the cleaning procedure described in this chapter.

The sample as it arrives is referred to as the uncleaned or dirty sample. Its weight is the gross weight of the sample. Dockage is assessed on the gross weight of the sample.

Dockage is assessed in two stages.

1. Follow the **Normal cleaning procedure**, using the Carter dockage tester.
2. Follow the procedure for **Cleaning for grade improvement**. This cleaning can be done at any time after the cleaning assessment has been completed.

Dockage not reported

- ▲ **Important:** Dockage is not reported for
- Canola, Sample Canada Account Fireburnt
 - Canola, Sample Salvage
 - Canola, Sample Condemned
 - Unofficial samples declared as processed

Normal cleaning procedure

- ▲ **Important:** Wear gloves and a mask to handle any sample which you suspect may contain hazardous substances.

1. Set up the Carter dockage tester as follows:

Feed control	# 3
Air control	# 5
Riddle	No. 000
Top sieve	Blank tray
Centre sieve	None
Bottom sieve	None
Sieve cleaner	Off

2. You also need the following hand sieves:

Round-hole sieves	Slotted sieve
No. 5	No. .028
No. 5.5	
No. 6	
No. 6.5	
No. 7	
No. 7.5	

3. Using a Boerner-type divider, divide the uncleaned sample to obtain a representative portion.

- Official samples shall be at least 1 kg.
- Unofficial samples shall be at least 1 kg.

4. For hand sieving use approximately 250 g per sieving

▲ Important: Select the appropriately sized round-holed sieve. When using a hand sieve, move the sieve from left to right 30 times, in a steady motion. One complete motion is approximately 10 cm from the center to one side, back to the center, approximately 10 cm to the other side and back to the center. When using a slotted sieve, ensure the slotted perforations are parallel with the sieving motion.

1. Sieve each portion over the round-hole sieve that will allow reasonably sound canola to pass through the sieve while removing large material.
2. Sieve each portion over the .028 slotted sieve 30 times, as described above.
5. Combine the separated, cleaned 250-g portions.
6. Turn on the Carter dockage tester.
7. Run the entire working sample through the Carter dockage tester for aspiration only.
8. Using a Boerner-type divider, divide the sample to a portion of not less than 10 g.
9. Analyze the 10-g portion to determine the percentage by weight of conspicuous admixture and soft earth pellets.
10. Determine the dockage, using the list under **Composition of dockage**.

Composition of dockage

Dockage includes

- Material that remains on top of the round-hole sieve
- Material that passes through the .028 slotted sieve
- Material removed by aspiration
- Material that passes over the No. 000 riddle
- Conspicuous admixture (CADMX), up to established grade tolerances, handpicked from the cleaned sample

—In ‘Canola, Rejected (grade) Account Stones’, dockage includes conspicuous admixture (CADMX) handpicked from the cleaned sample up to the tolerance for the grade of the sample.

—In sample grades, conspicuous admixture (CADMX) is not included as dockage. When the weight of the conspicuous admixture exceeds 2.0% of the net weight, the conspicuous admixture becomes a second reason for the sample grade. This is recorded in remarks.

- Soft earth pellets (SEP) handpicked from the cleaned sample
- Material removed by **Cleaning for grade improvement**

Primary elevator samples, commercially clean

Commercially clean samples exiting primary elevators can have up to 0.5% for broken and reasonably sound canola or rapeseed deducted from the gross weight of the dockage. There is no deduction applicable to producer deliveries or submitted samples.

Samples exiting primary elevators are considered commercially clean when meeting the requirements set out in the table below after following the **Normal cleaning procedure**.

Definition of commercial cleanliness, canola

Grade name	Material other than canola remaining on top of round-hole sieve and over No. 000 riddle %		Total net dockage %
	Roughage material such as wild oats, seed pods, knuckles	Total	
No. 1 Canada	0.3	0.5	2.5
No. 2 Canada	0.3	0.5	2.5
No. 3 Canada	0.3	0.5	2.5

Primary elevator samples, not commercially clean

In not commercially clean samples exiting primary elevators, there is no allowance for broken and reasonably sound canola or rapeseed. All the material removed by the slotted sieve is assessed as dockage.

Cleaning for grade improvement

If the grade of a sample can be improved by additional cleaning, perform the cleaning and add the additional material to dockage. Cleaning for grade improvement can be done at any time after the cleaning assessment has been completed, including on export.

1. After the cleaning assessment has been completed, examine the material to be removed and select your equipment according to the material you want to remove. See the table **Cleaning for grade improvement—Canola** for the list of equipment.
2. Sieve the sample by hand or pass it through the Carter dockage tester, depending on the material. When using a slotted sieve, select the sieve that will reduce the admixture of conspicuous inseparable material to within the grade tolerance with a minimum loss of reasonably sound canola.

Note: Canola seeds that do not meet the definition of damage (DMG) as defined in the grading factors section of this chapter are considered reasonably sound.

▲ **Important:** When using a hand sieve, move the sieve from left to right 30 times, in a steady motion. One complete motion is approximately 10 cm from the center to one side, back to the center, approximately 10 cm to the other side and back to the center. When using a slotted sieve, ensure the slotted perforations are parallel with the sieving motion.

3. Weigh the additional dockage and add it to the original dockage.

Cleaning for grade improvement—Canola

Material to be removed	Equipment	Effect on composition of dockage
Conspicuous admixture or damaged seeds	No. .032 slotted hand sieve No. .035 slotted hand sieve No. .038 slotted hand sieve No. .040 slotted hand sieve Carter dockage tester as described in the Normal cleaning procedure but with air setting at # 7, or alternate round-hole sieves. Note: When using the alternate air setting, the material originally removed by aspiration is to be reconstituted back into the sample prior to cleaning for improvement.	Damaged seeds and other material, including canola, are added to dockage. Not more than 5.0% of sound canola may be removed for each single grade improvement achieved.

Cleaning sample grade canola

For canola that qualifies only for 'Sample Canada, Account Admixture' after attempting cleaning for grade improvement, dockage is assessed using the No. .035 slotted sieve, the round-hole sieve appropriate for the admixture, and the Carter dockage tester with air control set at # 5. Conspicuous admixture (CADMX) is not added to dockage.

For canola that qualifies only for 'Sample Canada, Account Damaged' after attempting cleaning for grade improvement, dockage is assessed using the appropriate round-hole and slotted sieves and the Carter dockage tester with air control set at # 5. Use the slotted sieve appropriate for removing material consisting mainly of weed seeds and small broken grain. Conspicuous admixture (CADMX) is not added to dockage.

▲ **Important:** Variations from the above settings require authority from the Chief Grain Inspector.

Optional analysis

Where a shipper requests special cleaning of a carlot of grain at a terminal elevator, and the elevator manager agrees, dockage material will be analyzed for the presence of grain. The percentage and grade of any grain contained in the dockage will be reported.

Procedure

1. Analyze the official sample.
2. Record the following on inspection records:
 - The percentage by gross weight to the nearest 0.1% and the grade of canola.
 - The percentage by gross weight to the nearest 0.1% and the grade of grain separable from dockage.
 - The percentage of dockage.

Example:

95.0% Canola, No. 1 Canada

4.0% Barley, No. 1 Canada Western

1.0% dockage

Grading

Important definitions

Net weight of sample

The sample after cleaning and removal of dockage is referred to as the cleaned sample. Its weight is the net weight of the sample. Percentages by weight for grading refer to percentages of the cleaned sample, or the net weight.

Hazardous substances in samples

Wear gloves and a mask to handle any samples that you suspect may contain hazardous substances. Hazardous substances are defined in section 1 of the *Canada Grain Regulations* as “any pesticide, desiccant or inoculant”.

Rounding rules

Rounding rules are outlined in [schedule 3 of the Canada Grain Regulations](#). When official inspection results are expressed numerically, they should be expressed to the same decimal precision as the applicable tolerance in the primary and export grade determination tables.

Processed samples

An unofficial sample of grain declared to be conditioned or cleaned to meet end user specifications, and whereas, the determination of dockage and/or determination of commercially clean are not performed or reported.

Crush

A crush is one pass of the roller under firm pressure over a seed stick on masking tape.

Colour Guides

The Canadian Grain Commission produces the Canola/Rapeseed Colour Guide for reference when assessing distinctly green seeds and the Canola/Rapeseed Heated Colour Guide for reference when assessing heated seeds. Grain industry members may obtain copies of these colour guides by contacting the Canadian Grain Commission at 1-800-853-6705 or QAStandards-NormesAQ@grainscanada.gc.ca.

Non-registered varieties

A registered variety refers to varieties of crops that have been granted variety registration in Canada. Species, kinds or types of crops subject to variety registration in Canada are listed in Schedule III of the *Seeds Regulations*. Not all crops are subject to registration. The Canadian Food Inspection Agency (CFIA) is responsible for the registration of varieties in Canada. Consult the CFIA’s [database of varieties registered in Canada](#) online to determine if a given variety is registered in Canada.

Where grain of any kind is not a registered variety under the *Seeds Act*, no person shall, except with the permission of the Canadian Grain Commission, assign a statutory grade to that grain which is higher than the lowest grade established by regulation for that kind of grain.

Representative portion for grading

All grading is done on representative portions divided down from the clean sample, using a Boerner-type divider.

The optimum representative portion is the representative sample size within the minimum and maximum range used to obtain the most accurate result when assessing an objective factor. It is determined by taking into consideration the tolerance and concentration of the objective factor being assessed.

Representative portion of canola or rapeseed for grading (in grams)

Grading factor	Sample portion size range	
	Minimum	Maximum
Conspicuous admixture	5 g	50 g
Damage	5 g and/or 500 seeds	15 g and/or 1000 seeds
Distinctly green	500 seeds	1000 seeds
Ergot	500 g	working sample
Excreta	working sample	working sample
Fertilizer pellets	working sample	working sample
Fireburnt	working sample	working sample
Heated	1000 seeds	2000 seeds
Inconspicuous admixture	1 g	5 g
Odour	working sample	working sample
Rime	5 g	25 g
Sclerotinia sclerotiorum	100 g	500 g
Staghead	10 g	25 g
Stones	working sample	working sample
Treated seed	working sample	working sample

Grading factors

 Images available on web version

Broken (BKN)

Any broken canola that remains in the sample after cleaning and is not otherwise damaged is considered to be sound.

Colour (CLR)

In assessing colour, consider

- The amount and degree of discolouration of the whole seed, such as from weathering
- The amount of rime (seeds densely and completely covered by rime are assessed as damage (DMG))
- The proportion of crushed seeds which are only pale green or slightly immature and therefore not assessed as distinctly green (DGR)

Note: Whole seeds that are green may be as a result of thin seed coats of certain canola varieties. Whole green seeds of these varieties are not indicators of elevated chlorophyll levels and therefore are not considered distinctly green or assessed as part of colour evaluation. Only seeds which are distinctly green throughout when crushed are assessed as distinctly green (DGR).

- ▲ **Important:** Where colour is the grade determination, use the description under degree of soundness in the primary and export grade determination tables to assign the grade. The Canadian Grain Commission's Canola/Rapeseed Colour Guide may be used to assist in the determination of distinctly green seeds. Industry members may contact the Canadian Grain Commission at 1-800-853-6705 or QAStandards-NormesAQ@grainscanada.gc.ca to request this guide.
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Conspicuous admixture (CADMX)

Conspicuous admixture refers to material that remains in the sample after cleaning and is easily distinguished from canola without the use of magnification, including

- Domestic seeds such as flaxseed, yellow mustard or yellow *Brassica carinata*, and whole shrunken or broken kernels of other grains
- Weed seeds such as cow cockle, lamb's-quarters, cleavers, smartweed, ball mustard and pigweed
- Conspicuous foreign material such as ergot (ERG), excreta (EXCR), insect excreta (EXCR), sclerotinia (SCL) and stones (STNS)

Contaminated grain (CONTAM GRN)

▲ **Important:** Wear gloves and a mask to handle any sample that is suspected of containing contaminated grain.

Grain is contaminated for the purposes of the *Canada Grain Act* if the grain contains any substance in sufficient quantity that the grain is either

- (a) adulterated for the purposes of the *Food and Drugs Act*; or
- (b) contaminated within the meaning of the regulations made under section 51 of the *Safe Foods for Canadians Act*.

Treated seed

Treated seed is grain that has been adulterated with an agricultural chemical for agronomic purposes. The types of agricultural chemicals used to treat seed include pesticides, fungicides and inoculants. These seed dressings contain a dye to render the treated seed visually conspicuous. The colour of the dye varies depending upon the type of treatment and the type of grain. The current Canadian colour standard for pesticide and fungicide seed treatments for cereal (including corn) is red or pink. The colour standard for pesticide and fungicide seed treatments for canola is blue; however, green has also been used. Pulse crop (including soybeans) pesticide and fungicide seed treatments are typically blue or green. The coatings or stains may appear greasy or powdery and the surface area covered may range from tiny flecks to complete coverage.

Other chemical substances

Other chemical substances refers to any chemical residues either adhering to the kernel or remaining in the sample and to samples having a chemical odour of any kind.

Extraneous material

Can be defined as glass, metal, wood (including wood pellets), plastic or any other material not already defined in the Official Grain Grading Guide.

Procedure

If a sample is suspected of being coated with a pesticide, desiccant, inoculant or if the sample contains evidence of extraneous material, including any foreign chemical substance other than fertilizer pellets (FERT PLTS), the sample shall be graded 'Canola, Held IP Suspect Contaminated Grain' and submitted to the Canadian Grain Commission. Determination as to whether grain is contaminated will be made by the Grain Research Laboratory in consultation with the Chief Grain Inspector for Canada. Samples deemed to be contaminated are graded 'Canola, Sample Condemned'.

Damage (DMG)

Damage in canola includes seeds that are

- Distinctly shrunken or shriveled
- Badly discoloured from mould
- Completely and densely covered with rime
- Excessively weathered, sprouted (SPTD), tan coloured, distinctly green (DGR), heated (HTD), insect damaged (I DMG) or otherwise damaged

Total damage (TDMG) is the total of damaged crushed seeds and any visually damaged uncrushed seeds.

Procedure

1. Divide the sample to the appropriate representative portion.
2. Handpick the representative portion for visually damaged seeds.
3. Determine the percentage concentration by weight.

Note: See distinctly green (DGR) and heated (HTD) for the procedure to be followed in assessing these types of damage.

Distinctly green (DGR)

Distinctly green tolerances are applied to crushed seeds which are a distinct green throughout (refer to the Canadian Grain Commission's Canola/Rapeseed Colour Guide). Pale green or immature seeds are taken into account in the evaluation of colour. See **Colour (CLR)**.

Procedure

1. Prepare the appropriate number of strips from the cleaned sample.
2. Crush each strip with one pass of the roller under firm pressure.
3. Determine the percentage of distinctly green seeds.

Note: The Canadian Grain Commission's Canola/Rapeseed Colour Guide may be used to assist in the determination of distinctly green seeds. Industry members may contact the Canadian Grain Commission at 1-800-853-6705 or QAStandards-NormesAQ@grainscanada.gc.ca to request this guide.

Note: A 10-power magnifying lens may be used to confirm whether dark coloured seeds are brown or very dark green.

Earth pellets (EP)

- Hard earth pellets are pellets that do not crumble under light pressure. See **Stones (STNS)**.
- Soft earth pellets are pellets that crumble under light pressure. See **Soft earth pellets (SEP)**.

Ergot (ERG)

Ergot is a plant disease producing elongated fungus bodies with a purplish-black exterior, a purplish-white to off white interior, and a relatively smooth surface texture.

Excreta (EXCR)

Excrement from any animal including mammals, birds and insects.

▲ Important: Wear gloves and a mask to handle any samples that you suspect may contain excreta.

Extraneous material

See **Contaminated grain (CONTAM GRN)**

Fertilizer pellets (FERT PLTS)

Fertilizer pellets are a manufactured plant nutrient product used by producers in the production of grain. They are typically small, round or irregular shaped and usually white, grey, brown, pink or reddish in colour.

Procedure

- Handpick any fertilizer pellets and determine the concentration in the net working sample.
- Fertilizer pellets are assessed as stones (STNS) when the concentration does not exceed 1.0% of the net sample weight.

Samples containing fertilizer pellets in excess of 1.0% of the net sample weight are graded 'Canola, Held IP Suspect Contaminated Grain'. The sample should be submitted to the Canadian Grain Commission. Determination as to whether grain is contaminated will be made by the Grain Research Laboratory in consultation with the Chief Grain Inspector for Canada. Samples deemed to be contaminated are graded 'Canola, Sample Condemned'.

Fireburnt (FBNT)

Samples that show any evidence of being charred or scorched by fire are considered fireburnt. Evidence includes odour, pieces of charred wood, and so on. Fireburnt seeds pop when crushed.

Procedure

Samples considered fireburnt are graded 'Canola, Sample Canada, Account Fireburnt'

Foreign material (FM)

Foreign material in canola includes anything that is not canola, such as stones (STNS), ergot (ERG), sclerotinia (SCL), conspicuous admixture (CADMX) and inconspicuous admixture (INC ADMX).

Green (GR)

See **Distinctly green (DGR)**.

Heated (HTD)

Heated refers only to seeds that are distinctly or badly binburnt. Heated seeds may have a heated odour.

Crushed seeds may be

- Black—badly binburnt
- Dark brown- distinctly heated (refer to the Canadian Grain Commission's Canola/Rapeseed Heated Colour Guide)
- Light tan
 - light tan seeds without a heated odour are assessed as damaged (DMG)
 - light tan seeds with a heated odour are assessed as heated

- light tan seeds in combination with dark brown or black seeds, with or without a heated odour, are assessed as heated

Procedure

1. Prepare and examine the appropriate number of strips from the cleaned sample.
2. A crush is made with one pass of the roller under firm pressure.
3. Examine the crushed seeds for evidence of heating.
4. Where any heated seeds are found in the initial 1000 seeds or a heated odour is detected, a minimum of 2000 seeds must be analyzed.
5. Determine the percentage of heated seeds.
6. Heated seeds of other grains are included in the tolerance for heated.

Note: The Canadian Grain Commission's Canola/Rapeseed Heated Colour Guide may be used to assist in the determination of heated seeds. Industry members may contact the Canadian Grain Commission at 1-800-853-6705 or QASStandards-NormesAQ@grainscanada.gc.ca to request this guide.

Inconspicuous admixture (INC ADMX)

Inconspicuous admixture is defined as seeds of common wild mustard, domestic oriental mustard, domestic brown mustard, and brown *Brassica carinata* that are not readily distinguishable from canola.

Procedure

To determine the percentage by weight of inconspicuous admixture (INC ADMX), analyse the sample with the aid of a microscope.

Odour (ODOR)

There is no numeric tolerance for odour. Consider

- The basic quality of the sample
- The type and degree of the odour
- The presence of visible residue causing the odour

If odour is the grade determinant and there is . . .	Then the grade is . . .
A distinct objectionable odour not associated with the quality of the grain, but not heated or fireburnt	Canola, Sample Canada, Account Odour
A distinct heated odour	Canola, Sample Canada, Account Heated
A distinct fireburnt odour	Canola, Sample Canada, Account Fireburnt

Rime

Rime is the lining of the pod adhered to the seed. Seeds that are completely and densely covered with white rime are classed as damaged in any grade. Seeds with light rime sparsely covering the seed coat are

- Classed as sound if not otherwise damaged
- Considered in the evaluation of colour.

See **Colour (CLR)**

Procedure

See **Damage (DMG)**.

Sclerotinia sclerotiorum (SCL)

Sclerotinia sclerotiorum is a fungus producing hard masses of fungal tissue, called sclerotia. The sclerotia vary in size and shape, have a coarse surface texture, vary in exterior color from dark black to gray to white and have a pure white interior.

Soft earth pellets (SEP)

Soft earth pellets are

- Earth pellets that crumble into fine dust under light pressure, using a finger only—if they do not crumble, they are considered stones (STNS)
- Any non-toxic material of similar consistency

Procedure

1. Handpick soft earth pellets from a representative portion of the cleaned sample. Refer to the **Normal cleaning procedure**
 2. Soft earth pellets are removed as dockage. See **Composition of dockage**.
-

**Sprouted (SPTD) **

Sprouted canola is defined as those seeds having a ruptured seed coat in combination with either a sprout that protrudes beyond the normal contour of the seed or distinct swelling of the seed. Seeds having a ruptured seed coat that are otherwise sound are only considered sprouted when found in combination with seeds meeting the definition of sprouted.

Procedure

1. Divide the sample to the appropriate representative portion.
2. Handpick the representative portion for sprouted seeds.
3. Determine the percentage by weight.

Note: Sprouted canola is included in total damage (TDMG) for grade assessment.

Staghead

Staghead or white rust is a fungal disease of canola. It affects the flowering parts of the plant, resulting in distorted antler-like structures that are often covered by white or grey powdery spores. For grading, staghead bodies are considered conspicuous admixture (CADMX).

Stones (STNS)

Stones are hard shale, coal, hard earth pellets, and any other nontoxic materials of similar consistency. Fertilizer pellets are assessed as stones when constituting 1.0% or less of the net sample weight. See **Fertilizer pellets (FERT PLTS)** for the specific procedure to be followed when samples contain fertilizer pellets.

Procedure

1. Handpick stones from a representative portion of the cleaned sample.
 2. Determine stone concentration in the net sample.
- Samples of grain grown in western Canada containing stones in excess of basic grade tolerances, up to 2.5% are graded 'Canola, Rejected (basic grade) Account Stones'. The 'basic grade' refers to a grade established in the *Canada Grain Regulations* (grades listed in the first column in grade determination tables) that would have been assigned to the sample if it contained no stones.
 - Samples of grain grown in eastern Canada containing stones in excess of grade tolerances are degraded to lower grades. Samples containing stones in excess of the tolerance of the lowest grade established by regulation up to 2.5% are graded 'Canola, Sample Canada Account Stones'.
 - Samples of western and eastern Canadian grain containing more than 2.5% stones are graded 'Canola, Sample Salvage'.

Examples: Western Canada

Excerpt from grade determination tables for
Canola, Canada (CAN)

Grade name	Stones %
No. 1 Canada	0.05
No. 2 Canada	0.05
No. 3 Canada	0.05

Basic grade:..... Canola, No. 2 Canada

Reason for basic grade:..... 4% Distinctly Green

If the above sample contained	Grade in western Canada
0.08% stones	Canola, Rejected No. 2 Canada Account Stones
3.0% stones	Canola, Sample Salvage

Examples: Eastern Canada

Excerpt from grade determination tables for
Canola, Canada (CAN)

Grade name	Stones %
No. 1 Canada	0.05
No. 2 Canada	0.05
No. 3 Canada	0.05

Basic grade:..... Canola, No. 2 Canada

Reason for basic grade:..... 4% Distinctly Green

If the above sample contained	Grade in eastern Canada
0.08% stones	Canola, Sample Canada Account Stones
3.0% stones	Canola, Sample Salvage

Treated seed and other chemical substances

See **Contaminated grain (CONTAM GRN)**.

Variety (VAR)

Only varieties registered in Canada under the *Seeds Act* are eligible for the top grades of canola.

The Canadian Food Inspection Agency (CFIA) is responsible for the registration of varieties in Canada. Consult the CFIA's [database of varieties registered in Canada](#) online to determine if a given variety is registered in Canada.

Primary and export grade determination tables

Canola, Canada (CAN), standard of quality

Grading factor	No. 1 Canada	No. 2 Canada	No. 3 Canada	Grade, if No. 3 specs not met
Degree of soundness	Reasonably well matured, sweet, good natural colour	Fairly well matured, sweet, reasonably good natural colour	May have the natural odour associated with low-quality seed, not distinctly sour, musty, rancid, or any odour that would indicate serious deterioration	
Variety	Any variety of canola registered under the <i>Seeds Act</i>	Any variety of canola registered under the <i>Seeds Act</i>	Any variety of canola	
Standard of cleanliness Commercially pure seed	Not more than 1.0% of other seeds that are conspicuous and that are not readily separable from canola, to be assessed as dockage	Not more than 1.5% of other seeds that are conspicuous and that are not readily separable from canola, to be assessed as dockage	Not more than 2.0% of other seeds that are conspicuous and that are not readily separable from canola, to be assessed as dockage	Canola, Sample Canada Account Admixture

Canola, Canada (CAN), damage

Grading factor	No. 1 Canada	No. 2 Canada	No. 3 Canada	Grade, if No. 3 specs not met
Distinctly green %	2	6	20	Canola, Sample Canada Account Damaged
Heated %	0.1	0.5	2.0	Canola, Sample Canada Account Heated
Total % Damage	5	12	25	Canola, Sample Canada Account Damaged

Canola, Canada (CAN), foreign material included in dockage

Grading factor	No. 1 Canada	No. 2 Canada	No. 3 Canada	Grade, if No. 3 specs not met
Ergot %	0.05	0.05	0.05	Canola, Sample Canada Account Ergot
Excreta %	0.02	0.02	0.02	Canola, Sample Canada Account Excreta
Sclerotinia %	0.05	0.10	0.15	Canola, Sample Canada Account Admixture
Stones %	0.05	0.05	0.05	2.5% or less - West - Canola, Rejected (grade) Account Stones, or East - Canola, Sample Canada Account Stones Over 2.5% - Canola, Sample Salvage
Total % Conspicuous admixture	1.0	1.5	2.0	Canola, Sample Canada Account Admixture
Inconspicuous admixture (*) %	1.0	1.0	1.0	50% or less - Canola, Sample Canada Account Admixture Over 50% - Refuse screenings

*Inconspicuous admixture not included in dockage

Rapeseed, Canada (CAN), standard of quality

Grading factor	No. 1 Canada	No. 2 Canada	No. 3 Canada	Grade, if No. 3 specs not met
Degree of soundness	Reasonably well matured, sweet, good natural colour	Fairly well matured, sweet, reasonably good natural colour	May have the natural odour associated with low-quality seed, not distinctly sour, musty, rancid, or any odour that would indicate serious deterioration	
Variety	Any variety of rapeseed registered under the <i>Seeds Act</i>	Any variety of rapeseed registered under the <i>Seeds Act</i>	Any variety of rapeseed	
Standard of cleanliness Commercially pure seed	Not more than 1.0% of other seeds that are conspicuous and that are not readily separable from rapeseed, to be assessed as dockage	Not more than 1.5% of other seeds that are conspicuous and that are not readily separable from rapeseed, to be assessed as dockage	Not more than 2.0% of other seeds that are conspicuous and that are not readily separable from rapeseed, to be assessed as dockage	Rapeseed, Sample Canada Account Admixture

Rapeseed, Canada (CAN), damage

Grading factor	No. 1 Canada	No. 2 Canada	No. 3 Canada	Grade, if No. 3 specs not met
Distinctly green %	2	6	20	Rapeseed, Sample Canada Account Damaged
Heated %	0.1	0.5	2.0	Rapeseed, Sample Canada Account Heated
Total % Damage	5	12	25	Rapeseed, Sample Canada Account Damaged

Rapeseed, Canada (CAN), foreign material included in dockage

Grading factor	No. 1 Canada	No. 2 Canada	No. 3 Canada	Grade, if No. 3 specs not met
Ergot %	0.05	0.05	0.05	Rapeseed, Sample Canada Account Ergot
Excreta %	0.02	0.02	0.02	Rapeseed, Sample Canada Account Excreta
Sclerotinia %	0.05	0.10	0.15	Rapeseed, Sample Canada Account Admixture
Stones %	0.05	0.05	0.05	2.5% or less - West - Rapeseed, Rejected (grade) Account Stones, or East - Rapeseed, Sample Canada Account Stones Over 2.5% - Rapeseed, Sample Salvage
Total % Conspicuous admixture	1.0	1.5	2.0	Rapeseed, Sample Canada Account Admixture
Inconspicuous admixture (*) %	5	5	5	50% or less - Rapeseed, Sample Canada Account Admixture Over 50% - Refuse screenings

*Inconspicuous admixture not included in dockage

Export shipments

Export shipments can be commercially clean or not commercially clean.

Commercially clean (CCLN)

Export shipments defined as commercially clean may contain material as follows.

Definition of commercial cleanliness, canola

Grade name	Material other than canola remaining on top of round-hole sieve and over No. 000 riddle %		Total net dockage %
	Roughage material such as wild oats, seed pods, knuckles	Total	
No. 1 Canada	0.3	0.5	2.5
No. 2 Canada	0.3	0.5	2.5
No. 3 Canada	0.3	0.5	2.5

Dockage is reported to the nearest 0.1%.

A deduction for broken and reasonably sound canola removed as dockage is allowed

- On shipments from a terminal elevator, not for direct export, of up to 0.5%
- On shipments for direct export, of up to 0.8%
- On shipments for direct export, exiting primary elevators, of up to 0.5%

These deductions are applied to determine total net dockage for commercially clean shipments.

Not commercially clean (NCC)

Export shipments that do not meet the standards for commercial cleanliness are referred to as not commercially clean. Such shipments are allowed only with the permission of the Canadian Grain Commission.

For samples representing not commercially clean shipments approved by the Canadian Grain Commission for shipment from terminal elevators, dockage is reported to the nearest 0.1%.

Instead of the allowances for broken seed in commercially clean shipments, a deduction of up to 0.2% is applied to establish net dockage for direct exports only.

Determination of dockage

Follow the procedure for normal cleaning, with the Carter dockage tester set up as follows:

Feed control	#3
Air control	#5
Riddle	No. 000
Top sieve	Blank tray
Centre sieve	None
Bottom sieve	None
Sieve cleaner	Off

You will also need the following hand sieves.

Round-hole sieves	Slotted sieve
No. 5	No. .028
No. 5.5	
No. 6	
No. 6.5	
No. 7	
No. 7.5	

Composition of dockage

In export grade canola, dockage consists of

- Material other than canola that passes over the No. 000 riddle or remains on top of the round-hole sieve
- Material removed by the No. .028 slotted sieve
- Material removed by aspiration
- less the applicable allowance of broken and reasonably sound canola deducted from the slotted and/or aspiration
- Conspicuous admixture (CADMX) handpicked from the cleaned sample
- Material removed by **Cleaning for grade improvement**

Grading

Canola on export is graded in accordance with primary and export grade determination tables.