

24. Screenings

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Composition of screenings

Screenings consist of dockage material that qualifies only for Class IV grades. Screenings are graded in accordance with the specifications in the [Off-grades of Grain and Grades of Screenings](#) order.

Show the composition of screenings in detail on all records for carlots and cargoes. The composition determines the market value of the screenings.

Whole grain in screenings

Whole grain in screenings includes wheat, rye, barley, oats, triticale, flaxseed, rapeseed, canola, domestic mustard seed and pulses.

At a terminal or process elevator, show the percentage by weight and the grade of whole grain in screenings on all inspection records and grade certificates and as part of the grade name, if

- Shipments contain 6.0% or over by weight of whole grain which can be separated by the usual cleaning methods
- The grain qualifies for an official, special or off-grade

For example,

Grade: Refuse Screenings, less 15.0% Wheat, CW/CE Feed	
Composition	10.0% chaff
	15.0% Wheat CW/CE Feed
	8.0% large seeds
	67.0% small seeds and dust
Total	100.0%

Report the percentage by weight and the kinds of whole grain in the sample for samples representing shipments from primary elevators or unlicensed warehouses to destinations other than terminal elevators.

For example,

Grade: Refuse Screenings, less 15.0% Wheat	
Composition	10.0% chaff
	15.0% wheat
	8.0% large seeds
	67.0% small seeds and dust
Total	100.0%

Canola, rapeseed or domestic mustard seed in screenings

Record the percentage by weight of whole seeds of small oilseeds, canola, rapeseed or domestic mustard seed, that can be separated from samples of screenings by approved sieves.

Include small, shrivelled or broken seeds which pass through the slotted sieve in the total percentage by weight of small seeds and dust.

Dockage

Dockage is not assessed for screenings except for 'Mixed Feed Oats'.

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.

Grading factors

Ergot (ERG)

Ergot is a disease that attacks cereal grains and results in a fungus growth in place of the kernel of grain. The disease produces elongated fungal bodies that have 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

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

Heated, fireburnt and odour (HTD, FBNT, ODOR)

Screenings that are not sweet are graded according to their composition with the condition included in the grade name.

If odour is the grade determinant and there is . . .	Then the grade is . . .
An excessive objectionable odour not associated with the quality of the grain, but not heated or fireburnt	Screenings, (Grade Name) Account Odour
An excessive heated odour	Screenings, (Grade Name) Account Heated
An excessive fireburnt odour	Screenings, (Grade Name) Account Fireburnt

Injurious seeds

The following seeds are designated by the *Canada Feed Regulations* as detrimental to animal health:

bird rape	cockle, cow
cockle, purple	darnel
false flax, flat-seeded	false flax, small-seeded
false flax, western (large seeded)	mustard, black
mustard, Indian	mustard, hare's-ear
mustard, tumble	mustard, wild
mustard, wormseed	stinkweed

Knuckles and straw, (KNKLS&STRAW)

Knuckles include empty wheat heads, nodes of stems and short pieces of straw up to approximately 2.5 cm in length.

Mustard seed (MUS)

Common wild mustard and hare's ear mustard seed are designated as injurious in the *Canada Feed Regulations*.

Other domestic grains

Other domestic grains are any grains other than wheat, rye, barley, oats, triticale, flaxseed, solin, rapeseed, canola, domestic mustard seed and pulses.

Other large seeds (OLSDS)

Other large seeds are seeds not designated as injurious in the *Canada Feed Regulations*. They include lady's thumb and pale smartweed.

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 include soft fertilizer pellets (FERT PLTS) and any other nontoxic material of a similar consistency.

Stones (STNS)

Stones include hard shale, coal, hard earth pellets, fertilizer pellets (FERT PLTS) and other nontoxic materials of similar consistency.

Other factors

By-products of a manufacturing process

By-products of a manufacturing process are materials such as malt sprouts, oat hulls, ground and pelleted material. They do not qualify as grain screenings.

If inspection is requested on material that is wholly or partly processed grain screenings, it is graded sample according to the dominant product, for example, 'Sample Malt Sprouts', 'Sample Screenings, Ground', 'Sample Oat Hulls'.

Pelleted screenings

When official weighing or inspection of pellets made from Canadian grain screenings is requested, the official description is 'Canadian ground and pelleted screenings'.

At the request of a shipper, you may show the prime source of screenings in parentheses following the description, for example, 'Canadian ground and pelleted screenings (flaxseed)'.

If you are in doubt about the source, you may request a letter of certification from the shipper certifying the source of the screenings. Shippers may also request to have the word 'grain' included in the description of the pellets, for example, 'Canadian ground and pelleted grain screenings'.

Pellets received into terminal elevators made from processing residues of agricultural products are described as simply as possible, for example, 'Canadian canola extraction pellets', 'Canadian wheat bran pellets', 'Canadian beet pulp pellets'. You must be reasonably certain of the source or country of origin.

Cleaning screenings

Feed screenings

1. Divide a representative portion of approximately 500 g from the sample.
2. Sift the portion over the No. 4.5 round-hole sieve to assess the percentage of small weed seeds, chaff, hulls, dust, etc.
3. Handpick a representative portion of at least 10 g to determine the components of the sample.
4. Show the composition in detail in all records and endorse the backs of certificates.

Uncleaned screenings

Uncleaned screenings do not meet the specifications for No. 1 or No. 2 Feed screenings because of their content of weed seeds, hulls, chaff or dust. Uncleaned screenings must contain at least 35.0% of material that if separated would meet the grade requirements for No. 1 Feed screenings.

1. Divide a representative portion of not less than 750 g from the uncleaned sample.
2. Sift the portion over the No. 4.5 round-hole sieve to assess the percentage by weight of small weed seeds and dust.
3. Handpick a representative portion not less than 10 g to determine the components of the sample.
4. Show the composition of the sample in detail on all records and endorse the backs of certificates.

Refuse screenings

Refuse screenings do not meet the grade requirements for uncleaned screenings because of their content of weed seeds, chaff or dust.

1. Divide a representative portion of not less than 250 g from the uncleaned sample.
2. Sift the representative portion over the No. 5 buckwheat and the No. 4.5 round-hole sieves nested to determine the percentage by weight of seeds.
3. Class as large seeds those that pass through the No. 5 buckwheat sieve but remain on top of the No. 4.5 round-hole.
4. Class as small seeds material that passes through the No. 4.5 round-hole sieve.
5. Handpick a representative portion of at least 25 g of the material remaining on top of the 5 buckwheat sieve.

Notation as to kind

When no written request is received for a notation as to kind, such a notation is entered on the records only and it is stated that the notation does not appear on the certificate, for example, 'Canola—not shown on certificate'.

Grade determination tables

Screenings, standard of quality

Grading factor	No. 1 Feed Screenings	No. 2 Feed Screenings	Uncleaned	Refuse	Grade, if specs not met
Degree of soundness	Must be cool and sweet	Must be cool and sweet	No requirements	No requirements	(Grade name)", Account Heated, or Fireburnt, or Odour
Minimum quantity of shrunken or broken grain %	35	No minimum	*	No minimum	

Screenings, maximum tolerances

Grading factor	No. 1 Feed Screenings	No. 2 Feed Screenings	Uncleaned	Refuse	Grade, if specs not met
Ergot %	0.1	0.1	0.1	0.1	(Grade name) Screenings, Ergoty
Excreta %	0.02	0.02	0.10	0.10	Sample Screenings, Account Excreta
Other domestic grains %	0	5	10	10	Sample Screenings, with composition in remarks
Other large seeds %	10	No limit	*	No limit	
Sclerotinia %	0.25	0.25	0.25	0.25	Sample Screenings, Account Sclerotinia
Stones %	0.3	0.3	0.5	0.5	Sample Screenings, Account Stones
Wild buckwheat %	65	No limit	*	No limit	
Wild oats %	8	49	49	No limit	
Wild oat hulls	N/A	N/A	1	No limit	
Other than hare's ear or wild mustard seed %	1	1	*	No limit	
Total % Injurious seeds	2	2	*	No limit	

Screenings, maximum tolerances included in totals

Grading factor	No. 1 Feed Screenings	No. 2 Feed Screenings	Uncleaned	Refuse	Grade, if specs not met
Straw %	0.3	0.3	5.0	No limit	
Total % Knuckles and straw	3	3	5	No limit	
Hulls %	1	1	*	No limit	
Soft earth pellets %	1	1	3	3	Sample Screenings, Account Soft Earth Pellets
Total % Including weed seeds which pass through a No. 4.5 round-hole sieve, chaff, dust	3	3	*	No limit	
Hares ear or wild mustard seed %	2	2	*	No limit	
Total % Including canola, rapeseed, wild and domestic mustard seed	6	10	*	No limit	

Note: Each highlighted total includes all factors within this table listed prior to the total.

* Sample must contain 35% of material that qualifies for No. 1 Feed Screenings.

Mixed Feed Oats

Cleaning

1. Divide a representative portion of at least 750 g from the uncleaned sample.
2. Sift the representative portion over the No. 4.5 round-hole sieve to remove up to 1% by weight of small weed seeds, chaff and dust.

If more than 1% of small seeds, chaff and dust passes through the No. 4.5 round hole sieve,

1. Assess dockage.
 2. Record dockage to the nearest 0.1%.
3. Handpick soft earth pellets from the cleaned sample.
 - For samples containing up to 10% by weight of soft earth pellets (SEP), assess earth pellets as dockage.
 - For samples containing over 10% soft earth pellets by weight, grade 'Sample Screenings, Account Earth Pellets'.
 4. Show the composition in detail on all records for carlots and cargoes.

Composition

Samples must contain at least 50% by weight of wild oats.

Grade name	Material through No. 4.5 round-hole sieve %	Wild buckwheat, wheat heads, knuckles, straw and chaff			
		Knuckles, straw and chaff %	Wheat heads %	Wild buckwheat %	Total %
Mixed Feed Oats	1	4	5	5	5
No. 2 Mixed Feed Oats	1	4	5	5	10
Grade, if No. 2 specs not met	Report as dockage to the nearest 0.5%				

Grade name	Ergot %	Excreta %	Flaxseed %	Heated %	Other domestic grains %	Sclerotinia %	Stones %
Mixed Feed Oats	0.25	0.02	5	5	5	0.25	0.1
No. 2 Mixed Feed Oats	0.33	0.02	5	10	5	0.25	0.2
Grade, if No. 2 specs not met	Mixed Feed Oats, Ergoty	Mixed Feed Oats, Excreta		Mixed Feed Oats, Heated		Sample Screenings Account Sclerotinia	Sample Screenings Account Stones

