

Ontario Hard Red Winter Wheat

Technical Information



ONTARIO WHEAT

Ontario wheat producers have a history of innovation and the experience in wheat production to meet the quality demands of both domestic and international markets. Our producers have been growing high quality wheat for over fifty years.

Ontario wheat is graded by international grade standards that ensure our shipments of grain consistently meet contract specifications for quality, safety, and quantity.

Ontario is situated between the Great Lakes and the St. Lawrence River Basin, and our temperature climate and fertile soils are key components to producing top quality hard red winter wheat.

Because of Ontario's size and varied geography, its producers grow several varieties of wheat: from soft wheat in the southwest to hard wheat in the east and the north. Ontario's wheat production is supported by our proximity to strong transportation infrastructure (highways, rail lines, and river access to ocean ports) and an ample supply of energy sources.

2019 CANADA EASTERN HARD RED WINTER WHEAT

Quality data for Ontario's hard red winter (HRW) wheat is shown in the table on page 2. Wheat protein is ideal for many flat bread, noodle and pizza dough applications at 10.9% for 2019. Gluten strength is good for baking all types of bread products as indicated by its performance in the bake test.

This season's HRW falling number (358 seconds) and flour amylograph peak viscosity values (404 BU) are average which indicates good quality of wheat with low levels of sprouting and enzyme activity and good expected shelf life for end products. Clean milling yield from the 2019 composite samples is 75.5%.

CANADA EASTERN HARD RED WINTER WHEAT - EXPORT GRADE SPECIFICATIONS*

	No. 2 CEHRW	No. 3 CEHRW	CE FEED
Minimum test weight, kg/hL	74	69	65
Total foreign material including other cereal grains	1.5	3.5	10
Fusarium damage, %	1.0	1.5	5
Heated, %	0.75	2.00	2.50
Shrunken, %	10	12	no limit
Broken, %	10	10	50
Total shrunken & broken, %	11	13	no limit within broken tolerances
Smudge, %	1	5	no limit
Total smudge and blackpoint, %	20	35	no limit
Sprouted, %	2.5	8	no limit

* abridged from the Canadian Grain Commission's Official Grain Grading Guide
For complete official grain standards, see <http://www.grainscanada.gc.ca/oggg-gocg/04/oggg-gocg-4f-eng.htm#m>.

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CANADA EASTERN HARD RED WINTER WHEAT

Quality data for 2019 harvest survey grade 2 or better composite samples

WHEAT (13.5% M.B.)

Test Weight	80.8 kg/hL
Weight Per 1000 Kernels	37.81 g
Protein	10.94 %
Protein Loss on Milling	0.64 %
Falling Number	358 sec
Milling Yield - clean basis	75.5 %
Milling Yield - 0.50% ash basis	76.3 %

FLOUR (14% M.B.)

Protein	10.3 %
Amylograph Peak Viscosity	404 BU
Wet Gluten	26.1 %
Dry Gluten	8.52 %
Gluten Index	92.9 %
Ash Content	0.48 %
Colour, CIELAB L*	90.65
Colour, CIELAB a*	-0.89
Colour, CIELAB b*	9.93
Starch Damage	26.4 UCD
Solvent retention capacity - water	66.65 %
Solvent retention capacity - lactic acid 5%	137.28 %
Solvent retention capacity - sucrose 50 %	114.41 %
Solvent retention capacity - sodium carbonate 5%	98.57 %

FARINOGRAPH

Absorption	58.6 %
Dough Development Time	2.6 min
Mixing Tolerance Index	35 BU
Stability	6.9 min

EXTENSOGRAPH (45/90/135 min)

Length (E)	164/161/163 cm
Height at 5cm (R5)	230/236/278 BU
Max Height (Rmax)	325/338/387 BU
Area (A)	74/74/86 cm ²

ALVEOGRAPH

P	82 mmH ₂ O
Length (L)	77 mm
P/L	1.06
W	208 10 ⁻⁴ J

BAKING (REMIX-TO-PEAK BAKING TEST)

Bake mixing time	3.31 min
Bake mixing energy	9.12 W-h/kg dough
Loaf height	104.7 mm
Loaf volume	958 cm ³
Bread specific volume	6.4 cm ³ /g

Testing was conducted at the Grains Analytical Testing Laboratory in Guelph, Ontario, a joint venture between Grain Farmers of Ontario and SGS Canada. For a complete description of methodology used, please contact Paolo Santangelo, Commercial Manager at paolo.santangelo@sgs.com.

WHEN YOU NEED TO BE SURE

SGS