

Ontario Hard Red Spring 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.

2018 CANADA EASTERN HARD RED SPRING WHEAT

Quality data for Canada Eastern red wheat composites representing Ontario's hard red spring (HRS) wheat are shown in the table on page 2. Wheat protein is ideal for high volume pan bread, noodles, flat bread and wheat pasta applications at 13.9% for 2018. The gluten strength appears to be quite strong this year indicated by a long farinograph stability, high gluten index, and favourable bake quality characteristics such as loaf volume.

This season's HRS falling number (395 seconds) and flour amylograph peak viscosity values (389 BU). This indicates an excellent quality of wheat with low levels of sprouting and enzyme activity and good expected shelf life for end products. Clean milling yield from the 2018 composite samples is 72.8%.

CANADA EASTERN HARD RED SPRING WHEAT - EXPORT GRADE SPECIFICATIONS*

	No. 2 CERS	No. 3 CERS	CE FEED
Minimum test weight, kg/hL	72	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
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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Page 2

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Quality data for 2018 harvest survey grade 2 or better composite samples

WHEAT (13.5% M.B.)

Test Weight	78.4 kg/hL
Weight Per 1000 Kernels	33.6 g
Protein	13.85 %
Protein Loss on Milling	1.03 %
Falling Number	395 sec
Milling Yield - clean basis	72.8 %
Milling Yield - 0.50% ash basis	71.8 %

FLOUR (14% M.B.)

Protein	12.82 %
Amylograph Peak Viscosity	389 BU
Wet Gluten	32.4 %
Dry Gluten	11.71 %
Gluten Index	97.4 %
Ash Content	0.52 %
Colour, CIELAB L*	89.84
Colour, CIELAB a*	-1.47
Colour, CIELAB b*	11.72
Starch Damage	27.1 UCD
Solvent retention capacity - water	75.27 %
Solvent retention capacity - lactic acid 5%	120.52 %
Solvent retention capacity - sucrose 50 %	152.27 %
Solvent retention capacity - sodium carbonate 5%	105.76 %

FARINOGRAPH

Absorption	66.7 %
Dough Development Time	6.4 min
Mixing Tolerance Index	31 BU
Stability	11.3 min

EXTENSOGRAPH (45/90/135 min)

Length (E)	202/197/187 cm
Height at 5cm (R5)	217/288/318 BU
Max Height (Rmax)	432/507/550 BU
Area (A)	111/131/133 cm ²

ALVEOGRAPH

P	113 mmH ₂ O
Length (L)	113 mm
P/L	1
W	446 10 ⁻⁴ J

BAKING (REMIX-TO-PEAK BAKING TEST)

Bake mixing time	4.22 min
Bake mixing energy	10.64 W-h/kg dough
Loaf height	118 mm
Loaf volume	1098 cm ³
Bread specific volume	7.3 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.

Revised version.

WHEN YOU NEED TO BE SURE

SGS