

# 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.

### 2018 CANADA EASTERN HARD RED WINTER WHEAT

Quality data for Canada Eastern red wheat composites representing Ontario's hard red winter (HRW) wheat are shown in the table on page 2. Wheat protein is ideal for many flat bread, noodle and pizza dough applications at 12.1% for 2018. Gluten strength is good for baking all types of bread products as indicated by the bake test and Extensograph results.

This season's HRW falling number (397 seconds) and flour amylograph peak viscosity values (485 BU) are above average. 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 74.8%.

### 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>.

# Ontario Hard Red Winter Wheat

## Technical Information

Page 2



### CANADA EASTERN HARD RED WINTER WHEAT

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

#### WHEAT (13.5% M.B.)

Test Weight	79.9 kg/hL
Weight Per 1000 Kernels	39.25 g
Protein	12.07 %
Protein Loss on Milling	0.84 %
Falling Number	397 sec
Milling Yield - clean basis	74.8 %
Milling Yield - 0.50% ash basis	75.9 %

#### FLOUR (14% M.B.)

Protein	11.23 %
Amylograph Peak Viscosity	485 BU
Wet Gluten	28.9 %
Dry Gluten	9.89 %
Gluten Index	96 %
Ash Content	0.48 %
Colour, CIELAB L*	90.54
Colour, CIELAB a*	-1.41
Colour, CIELAB b*	10.08
Starch Damage	26.1 UCD
Solvent retention capacity - water	66.03 %
Solvent retention capacity - lactic acid 5%	115.84 %
Solvent retention capacity - sucrose 50 %	145.26 %
Solvent retention capacity - sodium carbonate 5%	92.57 %

#### FARINOGRAPH

Absorption	59.6 %
Dough Development Time	5.3 min
Mixing Tolerance Index	34 BU
Stability	9.6 min

#### EXTENSOGRAPH (45/90/135 min)

Length (E)	173/167/169 cm
Height at 5cm (R5)	248/306/334 BU
Max Height (Rmax)	412/463/517 BU
Area (A)	93/100/111 cm <sup>2</sup>

#### ALVEOGRAPH

P	84 mmH <sub>2</sub> O
Length (L)	89 mm
P/L	0.94
W	263 10 <sup>-4</sup> J

#### BAKING (REMIX-TO-PEAK BAKING TEST)

Bake mixing time	3.54 min
Bake mixing energy	8.51 W-h/kg dough
Loaf height	115.1 mm
Loaf volume	1003 cm <sup>3</sup>
Bread specific volume	7 cm <sup>3</sup> /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](mailto:paolo.santangelo@sgs.com).

Revised version.

WHEN YOU NEED TO BE SURE

**SGS**