

# 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.

### 2019 CANADA EASTERN HARD RED SPRING WHEAT

Quality data for Ontario's hard red spring (HRS) wheat is shown in the table on page 2. Wheat protein average of 12.8% is ideal for high volume pan bread, noodles, flat bread and wheat pasta applications. Although the protein content is lower compared to last year the gluten strength remains quite strong indicated by good farinograph stability, high gluten index, and favourable bake quality characteristics such as loaf volume.

This season's HRS falling number (361 seconds) and flour amylograph peak viscosity values (444 BU) indicate very good quality of wheat with low levels of sprouting and no excess enzyme activity. Clean milling yield from the 2019 composite samples is 75.0%.

### 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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### CANADA EASTERN HARD RED SPRING WHEAT

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

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

Test Weight	81 kg/hL
Weight Per 1000 Kernels	34.25 g
Protein	12.83 %
Protein Loss on Milling	0.44 %
Falling Number	361 sec
Milling Yield - clean basis	75 %
Milling Yield - 0.50% ash basis	72 %

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

Protein	12.39 %
Amylograph Peak Viscosity	444 BU
Wet Gluten	31.7 %
Dry Gluten	11.07 %
Gluten Index	98.6 %
Ash Content	0.56 %
Colour, CIELAB L*	89.39
Colour, CIELAB a*	-1
Colour, CIELAB b*	12.58
Starch Damage	27.1 UCD
Solvent retention capacity - water	75.84 %
Solvent retention capacity - lactic acid 5%	156.09 %
Solvent retention capacity - sucrose 50 %	116.73 %
Solvent retention capacity - sodium carbonate 5%	108.44 %

#### FARINOGRAPH

Absorption	63.4 %
Dough Development Time	4.7 min
Mixing Tolerance Index	30 BU
Stability	8.3 min

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

Length (E)	195/185/185 cm
Height at 5 cm (R5)	246/297/300 BU
Max Height (Rmax)	407/476/488 BU
Area (A)	106/116/119 cm <sup>2</sup>

#### ALVEOGRAPH

P	103 mmH <sub>2</sub> O
Length (L)	103 mm
P/L	1
W	369 10 <sup>-4</sup> J

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

Bake mixing time	3.27 min
Bake mixing energy	9.26 W-h/kg dough
Loaf height	112.6 mm
Loaf volume	1028 cm <sup>3</sup>
Bread specific volume	6.8 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).

WHEN YOU NEED TO BE SURE

**SGS**