

# Ontario Soft Red Winter Wheat

## Technical Information



### ONTARIO WHEAT

Ontario wheat producers have the experience and a history of innovation in wheat production to meet the quality demands of the international marketplace. Our producers have been growing export quality wheat for over fifty years. Ontario hard red winter wheat's flour yield, lower ash content and medium strength protein numbers ensure a high performing wheat for flat breads, noodles, pizza dough and other specialty products.

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

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

Ontario's varied geography and size results in diversified wheat production – from soft wheat in the southwest to hard wheat in the east. Other key advantages to Ontario wheat include our proximity to a strong transportation infrastructure of highways, rail lines and river access to ocean ports and our ample supply of energy sources.

### 2016 WHEAT, CANADA EASTERN RED - SOFT RED WINTER WHEAT

Quality data for Canada Eastern red wheat composites representing Ontario's soft red winter wheat varieties are shown in the table on page 2, segregated by grade and region. Wheat protein (9.1-10.3%) and ash content (1.26-1.35%) are good for traditional soft wheat applications in 2016.

This season's wheat falling numbers (363-389 seconds) and flour amylograph peak viscosity values (763-903 BU) are very high. This indicates low levels of sprouting and enzyme activity, resulting in low cookie spread but expected longer shelf life for end products. Milling yield from the 2016 composite samples is 79.4-80.8%.

### CANADA EASTERN SOFT RED WINTER WHEAT - EXPORT GRADE SPECIFICATIONS\*

	No. 2 CESRW	No. 3 CESRW	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 Soft Red Winter Wheat

## Technical Information



### CANADA EASTERN SOFT RED WINTER WHEAT

Quality data for 2016 harvest survey grade composite samples

	No. 1 Southwest	No. 2 Southwest	No. 1 Northwest	No. 2 Northwest	No. 1 and 2 Niagara	Units
<b>WHEAT</b>						
Test Weight	78.9	79.7	79.1	79.1	80.3	kg/hL
Weight Per 1000 Kernels	33.4	36.3	33.4	37.0	32.7	g
Protein C.N.A. <sup>1</sup>	9.9	9.1	9.4	9.2	10.3	%
Protein (dry matter basis)	11.5	10.6	10.8	10.7	11.9	%
Protein Loss on Milling	1.5	1.2	0.8	1.1	1.5	%
Ash Content	1.27	1.30	1.35	1.32	1.26	%
Falling Number	387	365	387	363	389	sec
Particle Size Index	81.1	81.1	81.1	81.1	81.1	%
Milling Yield - clean basis	72.2	73.5	73.3	74.5	73.4	%
Milling Yield - 0.50% ash basis	79.7	80.5	80.8	80.5	79.4	%
<b>FLOUR</b>						
Protein C.N.A. <sup>2</sup>	8.4	8.0	8.5	8.2	8.8	%
Amylograph Peak Viscosity	845	903	763	794	775	BU
Wet Gluten <sup>2</sup>	22.0	20.0	23.7	21.4	22.8	%
Dry Gluten <sup>2</sup>	7.6	6.7	8.1	7.3	7.7	%
Gluten Index <sup>2</sup>	82.1	82.7	70.3	74.6	-	%
Ash Content <sup>2</sup>	0.35	0.36	0.35	0.38	0.38	%
Starch Damage	17.2	18.4	17.5	18.2	18.0	UCD
Solvent retention capacity - water	54	55	53	54	54	%
Solvent retention capacity - lactic acid 5%	116	114	112	108	116	%
Solvent retention capacity - lactic acid after 30 days	114	114	110	106	113	%
Solvent retention capacity - sucrose 50%	93	99	97	99	98	%
Solvent retention capacity - sodium carbonate 5%	79	77	76	75	80	%
<b>FARINOGRAPH</b>						
Absorption	51.4	51.4	51.4	52.2	52.3	%
Dough Development Time	1.09	1.16	1.13	1.07	1.36	min
Mixing Tolerance Index	71	85	68	103	80	BU
Stability	2.92	2.03	3.77	1.93	4.24	min
<b>ALVEOGRAPH</b>						
P	33	35	33	29	30	mmH <sub>2</sub> O
Length (L)	92	66	78	83	107	mm
P/L	0.36	0.53	0.42	0.35	0.28	
W	88	74	78	64	80	10 <sup>-4</sup> J
<b>COOKIE TEST</b>						
Cookie, Sugar snap - Width	72.9	72.9	73.1	73.2	72.1	mm
Cookie, Sugar snap - Ratio (width/thickness)	7.5	7.3	7.3	7.6	7.3	w/t
Cookie, Sugar snap - Spread Factor	75	73	73	76	73	mm

<sup>1</sup> Data is reported on a 13.5% moisture basis for wheat

<sup>2</sup> Data is reported on a 14.0% moisture basis for flour

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).