

Ontario Soft 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. 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.

2017 WHEAT, CANADA EASTERN RED - SOFT RED WINTER WHEAT

Quality data for Canada Eastern red wheat composites representing Ontario's soft red winter wheat are shown in the table on page 2, segregated by grade and region. Wheat protein (8.6-9.2%) and ash content (1.3-1.42%) are good for traditional soft wheat applications in 2017.

This season's wheat falling numbers (332-370) and flour amylograph peak viscosity values (373-732) are average. This indicates relatively low levels of sprouting and enzyme activity, as well as high cookie spread. Milling yields from the 2017 composite sample range from 74.6-75.2%.

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>.

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CANADA EASTERN SOFT RED WINTER WHEAT

Quality data for 2017 harvest survey grade composite samples

WHEAT	No. 1 Southwest	No. 2 Southwest	No. 1 Northwest	No. 2 Northwest	No. 1 and 2 Niagara	Units
Test Weight	78.7	79.7	78.8	77.5	79.4	kg/hL
Weight Per 1000 Kernels	35.8	35.5	34.3	35.4	35.0	g
Protein C.N.A. ¹	8.7	9.0	8.8	8.6	9.2	%
Protein (dry matter basis)	11.0	11.4	11.2	10.9	11.7	%
Protein Loss on Milling	1.3	1.5	1.5	1.3	1.7	%
Ash Content	1.34	1.42	1.38	1.39	1.30	%
Falling Number	370	362	332	339	349	sec
Particle Size Index	82.4	78.9	81.0	82.3	82.0	%
Milling Yield - clean basis	75.1	75.2	74.7	74.6	75.0	%
Milling Yield - 0.50% ash basis	77.4	76.8	76.6	75.3	79.3	%
FLOUR						
Protein C.N.A. ²	7.4	7.5	7.3	7.3	7.5	%
Amylograph Peak Viscosity	732	625	435	373	587	BU
Wet Gluten ²	19.2	20.1	20.5	19.6	19.7	%
Dry Gluten ²	6.1	6.7	6.7	6.4	6.5	%
Gluten Index ²	87.1	85.3	75.5	82.5	83.9	%
Ash Content ²	0.45	0.47	0.46	0.49	0.41	%
Colour, CIELAB L*	91.7	91.8	91.7	91.8	91.7	
Colour, CIELAB a*	-1.6	-1.6	-1.8	-1.7	-1.7	
Colour, CIELAB b*	8.80	9.00	9.70	9.10	9.30	
Starch Damage	16.9	16.9	17.6	17.8	17.6	UCD
Solvent retention capacity - water	53	54	55	55	55	%
Solvent retention capacity - lactic acid 5%	102	96	96	101	99	%
Solvent retention capacity - lactic acid after 30 days	-	-	-	-	-	%
Solvent retention capacity - sucrose 50%	96	96	96	99	99	%
Solvent retention capacity - sodium carbonate 5%	77	77	76	77	77	%
FARINOGRAPH						
Absorption	51.0	51.7	51.4	50.3	51.4	%
Dough Development Time	1.28	0.96	0.99	1.19	1.16	min
Mixing Tolerance Index	116	120	113	103	115	BU
Stability	1.10	1.08	1.08	1.63	1.13	min
ALVEOGRAPH						
P	27	26	25	27	28	mmH ₂ O
Length (L)	89	81	119	94	81	mm
P/L	0.30	0.32	0.21	0.29	0.35	
W	64	52	63	59	59	10 ⁻⁴ J
COOKIE TEST						
Cookie, Sugar snap - Width	74.4	73.9	75.3	74.9	74.9	mm
Cookie, Sugar snap - Ratio (width/thickness)	8.1	8.0	8.1	7.9	8.1	w/t
Cookie, Sugar snap - Spread Factor	81	80.3	80.5	79	81.1	mm

1 Data is reported on a 13.5% moisture basis for wheat
 2 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.