

# OntarioWheat Technical Information



100 Stone Road West  
Suite 201  
Guelph ON N1G 5L3

Tel: 519-767-6537  
Fax: 519-767-9713

## 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 soft wheat for over fifty years. Ontario wheat's kernel size, lower protein and lower ash content ensure an optimal wheat for traditional soft wheat baking applications.

Ontario wheat is graded by the Canadian Grain Commission, an internationally recognized standard of grain quality. CGC monitoring ensures 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 temperate climate and fertile soils are key components to producing top quality soft red winter wheat. Ontario's varied geography and size results in diversified wheat production - from soft wheats in the southwest to hard wheats 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 resources.

## 2008 WHEAT, CANADA EASTERN RED - SOFT RED WINTER WHEAT

Quality data for Canada Eastern Red wheat composites representing soft red winter wheat varieties are shown in the table on page 2. Test weight and kernel weight are a strong attribute of Ontario wheat with a seven year average of 80.7 kg/hL and 35.0 g per hundred kernels respectively. Wheat protein and ash content are ideal for traditional soft wheat applications at 9.6 % and 1.50 % over seven years. Wheat falling number, flour amylograph peak viscosity values and alpha-amylase activity indicate soundness in this wheat class. Milling yield is quite consistent with an average of 75.5 %. Farinograph strength remains stable each year while alveograph data varies slightly in extensibility and dough strength properties year over year. Cookie spread and ratio of spread to thickness values are sound at an average 83.1 mm and a ratio of 9.0 over seven years.

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

	No. 2 CESRW	No. 3 CESRW
Minimum test weight, kg/hL	74	69
Total foreign material including other cereal grains	(Max.) 1.5	(Max.) 3.5
Fusarium damage, %	1.0	1.5
Heated, %	0.75	2.0
Shrunken, %	10	12
Broken, %	10	10
<b>Total shrunken &amp; broken, %</b>	<b>11</b>	<b>13</b>
Smudge, %	1	5
<b>Total smudge and blackpoint, %</b>	<b>20</b>	<b>35</b>
Sprouted, %	2.5	8

\* abridged from the Canadian Grain Commission's Official Grain Grading Guide

For complete official grain standards, see <http://www.grainscanada.gc.ca/Pubs/GGG/ggg-e.htm>

EXPERIENCE. INNOVATION. QUALITY. WE DELIVER.

**WHEAT, CANADA EASTERN RED – SOFT RED WINTER WHEAT VARIETIES**

Quality data for 2000-2008 harvest survey grade composite samples

	2008	2007	2006	2005	2003	2002	2001
<b>WHEAT</b>							
Test weight, kg/hL	81.3	80.4	79.5	81.2	79.4	79.1	80.7
Weight per 100 kernels, g	35.6	35.5	35.0	33.8	34.4	33.2	37.2
Protein content, %	9.4	9.4	9.2	10.6	9.2	9.6	10.1
Protein content, % (dry matter basis)	10.9	10.9	10.6	12.3	10.7	11.1	11.7
Ash content, %	1.53	1.46	1.44	1.55	1.52	1.53	1.50
Alpha-amylase activity, units/g	5.0	3.5	3.0	2.5	3.0	3.0	1.5
Falling number, s	360	370	320	355	350	350	355
Flour yield, %	76.5	75.4	74.8	75.4	75.4	74.7	76.0
PSI, %	69	71	71	70	72	72	71
<b>FLOUR</b>							
Protein content, %	8.3	8.4	8.1	9.3	8.5	8.7	9.1
Wet gluten content, %	21.5	22.1	19.6	23.2	21.3	20.0	23.1
Ash content, %	0.48	0.45	0.45	0.47	0.49	0.47	0.47
Grade colour, Satake units	0.4	-1.1	-0.4	-0.5	0.2	-0.8	-0.3
AGRON colour, %	59	70	65	67	63	72	64
Starch damage, %	3.6	3.5	3.4	3.2	3.4	2.9	3.2
Alpha-amylase activity, units/g	1.0	1.0	1.5	0.5	1.5	1.0	0.5
Amylograph peak viscosity, BU	480	640	525	650	530	770	650
Maltose value, g/100g	1.3	1.2	1.1	1.1	1.1	1.0	1.1
AWRC, %	62.2	60.9	61.8	66.5	65.6	61.6	65.8
<b>FARINOGRAM</b>							
Absorption, %	51.7	51.2	51.8	53.4	51.4	50.0	52.6
Development time, min	2.00	1.00	1.25	3.00	1.25	1.25	1.5
Mixing tolerance index, BU	75	85	95	80	120	95	105
Stability, min	3.0	2.5	2.0	4.0	2.0	3.0	3.0
<b>ALVEOGRAM</b>							
Length, mm	97	109	117	127	128	130	120
P (height x 1.1), mm	32	30	34	36	28	32	32
W, x 10 <sup>-4</sup> joules	66	72	85	124	88	108	95
<b>COOKIE TEST</b>							
Spread, mm	81.4	83.6	84.6	83.9	82.7	82.8	83.0
Ratio (spread/thickness)	8.4	9.3	9.6	8.8	8.6	9.4	8.8

Unless otherwise specified, data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for flour