

# OntarioWheat Technical Information



Ontario Wheat

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 wheat for over fifty years. Ontario wheat's flour yield, high test weight and strong protein numbers ensure a high performing wheat for traditional hard wheat baking applications.

Ontario wheat is graded by the Canadian Grain Commission (CGC), 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 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 - HARD RED SPRING WHEAT

Quality data for Canada Eastern Red wheat composites representing hard red spring wheat varieties are shown in the table on page 2. Due to weather related quality issues, no samples were available for the 2008 Harvest Survey. Surveys from past years indicate test weight and kernel weight are a strong attribute of Ontario wheat with a six year average of 81.5 kg/hL and 33.8 g per hundred kernels respectively. Wheat protein is ideal for many traditional hard wheat baking applications at 13.6 % and 15.8 % on a dry matter basis over six 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 75.3 %.

## CANADA EASTERN RED SPRING - EXPORT GRADE SPECIFICATIONS\*

	No. 2 CEHRS	No. 3 CEHRS
Minimum test weight, kg/hL	72	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>

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**WHEAT, CANADA EASTERN RED – HARD RED SPRING WHEAT VARIETIES**

Quality data for 2000-2007 harvest survey grade composite samples

	2007	2006	2005	2003	2002	2001
<b>WHEAT</b>						
Test weight, kg/hL	83.0	81.7	79.9	79.0	82.3	83.0
Weight per 100 kernels, g	37.3	32.5	32.3	32.3	34.4	33.8
Protein content, %	12.7	13.9	14.8	13.4	14.0	13.0
Protein content, % (dry matter basis)	14.7	16.1	17.1	15.5	16.2	15.1
Ash content, %	1.58	1.73	1.77	1.65	1.74	1.64
Alpha-amylase activity, units/g	26.0	9.0	16.5	5.5	12.0	9.5
Falling number, s	290	345	335	395	310	340
Flour yield, %	76.2	74.9	74.3	75.7	75.2	75.7
PSI, %	51	52	52	51	51	54
<b>FLOUR</b>						
Protein content, %	12.0	13.3	14.4	12.8	13.1	12.1
Wet gluten content, %	31.8	33.4	37.4	33.6	33.8	31.9
Ash content, %	0.52	0.55	0.55	0.53	0.51	0.50
Grade colour, Satake units	-1.4	-0.8	-0.3	-1.2	-1.4	-1.3
AGRON colour, %	67	64	62	70	70	71
Starch damage, %	9.0	8.5	7.4	8.5	8.7	8.0
Alpha-amylase activity, units/g	3.0	3.0	5.0	1.5	6.0	4.0
Amylograph peak viscosity, BU	390	350	325	535	300	280
Maltose value, g/100g	3.1	2.8	2.7	2.5	3.1	3.1
<b>FARINOGRAM</b>						
Absorption, %	64.8	65.0	60.9	65.7	65.3	65.7
Development time, min	6.00	3.00	7.25	5.75	5.5	3.5
Mixing tolerance index, BU	30	10	25	30	30	30
Stability	9.5	14.5	11.0	8.5	9.0	7.0
<b>EXTENSOGRAM</b>						
Length, cm	19	20	22	23	22	23
Height at 5 cm, BU	400	380	350	280	380	240
Maximim height, BU	700	740	730	505	695	425
Area, cm squared	165	190	195	160	200	135
<b>ALVEOGRAM</b>						
Length, mm	94	116	110	112	102	109
P (height x 1.1), mm	123	125	112	115	128	111
W, x 10-4 joules	412	533	464	446	492	402
<b>BAKING (REMIX-TO-PEAK BAKING TEST)</b>						
Absorption, %	62	61	64	63	64	62
Remix time, min	3.2	4.0	3.2	3.1	3.9	3.0
Loaf volume, cm cubed/100 g flour	820	880	965	920	885	840

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