Ontario Hard Red Winter Wheat

2025 Technical Information

ONTARIO WHEAT

Ontario wheat producers are committed to growing high-quality wheat, with a long-standing reputation for innovation and experience in meeting the quality demands of domestic and international markets. For over 50 years, Ontario wheat producers have grown high-quality wheat, rigorously graded to international standards that ensure each shipment meets specifications for quality, safety and quantity.

Situated between the Great Lakes and the St. Lawrence River Basin, Ontario's climate, ideal temperatures, and fertile soils provide all the key components to produce high-quality spring and winter wheat. Ontario's diverse landscape supports several varieties and classes of wheat, with soft wheat predominantly grown in the southwest and Niagara regions, and hard wheat grown in the eastern and northern regions. With reliable transportation networks - like highways, rail lines and river access to ocean ports – as well as abundant energy resources, Ontario's wheat industry is supported and well positioned to deliver consistent supplies of high-quality wheat to customers near and far.

2025 CANADA EASTERN HARD RED WINTER WHEAT

Quality data for Canada Eastern Hard Red Winter Wheat (CEHRW) composites, representing Ontario's hard red winter (HRW) wheat, are shown in the table on page 2. The 2025 composite sample shows a milling yield of 74.9%, an increase from 72.7% in 2024. This season's HRW falling number (367 seconds) and flour amylograph peak viscosity (639 BU) are strong, indicating sound wheat quality and good starch integrity.

The wheat protein content (11.6%) is comparable to 2025 and suitable for a range of flatbread, noodle, and pizza dough applications. Gluten strength is good for baking all types of bread products, as demonstrated in the baking test. This class of wheat also exhibits excellent blending potential.

CANADA EASTERN HARD RED WINTER WHEAT - GRADE SPECIFICATIONS*

The below tables demonstrate the grading tolerances for CEHRW grades, abridged from the Canadian Grain Commission's Official Grain Grading Guide. In Ontario, wheat graded at No 2. CEHRW and above is typically considered milling grade.

	No. 2 CEHRW	No.3 CEHRW	No. 4 CEHRW
Minimum test weight, kg/hL	74	69	65
Total foreign material	1.5	3.5	10.0
Fusarium damage, %	1.0	1.5	5.0
Total heated, binburnt, severely mildewed, rotted, mouldy, %	0.8	2.0	2.5
Shrunken, %	10	12	no limit
Broken, %	10	10	50
Total shrunken and broken, %	11	13	no limit within broken tolerances
Total Smudge, %	1.0	5.0	no limit
Total smudge and blackpoint, %	20	35	no limit
Sprouted, %	2.5	8.0	no limit

*For complete official grain standards, see the following website: https://www.grainscanada.gc.ca/en/grain-quality/official-grain-grading-guide/04-wheat/primary-grade-determination/cesrw-wheat.html For more details on Grain Farmers of Ontario's annual wheat harvest survey, visit www.gfo.ca/ontario-wheat-quality/

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Canada Eastern Hard Red Winter Wheat

Quality data for 2025 harvest survey grade 2 or better composite sample

Wheat (13.5% M.B.)	Units	2025
Test Weight	kg/hL	82
Weight Per 1000 Kernels	g	32.2
Protein (D.M.B.)	%	11.6
Protein Loss on Milling	%	1.1
Falling Number	sec	367
Milling Yield	%	74.9
Milling Yield - 0.50% Ash Basis	%	78.4

Flour (14% M.B)

Protein	%	10.5
Amylograph Peak Viscosity	BU	639
Wet Gluten	%	25.3
Dry Gluten	%	9.0
Gluten index	%	100
Ash	%	0.43
Colour, L*		91.1
Colour, a*		-0.98
Colour, b*		9.6
Starch Damage as is	UCD	22.3
Solvent Retention Capacity - Water	%	61.6
Solvent Retention Capacity - Lactic Acid 5%	%	139.0
Solvent Retention Capacity - Sucrose 50%	%	101.3
Solvent Retension Capacity - Sodium Carbonate 5%	%	78.7

Farinograph

Absorption	%	54.5
Dough Development Time	min	1.5
Mixing Tolerance Index	BU	43
Stability	min	4.9

Extensograph (45/90/135 min)

Length (E)	cm	19.4/18.0/17.6
Height at 5 cm (R5)	BU	306/354/342
Max Height (Rmax)	BU	504/567/560
Area (A)	cm^2	127/131/123

Alveograph (15.0% M.B.)

P	mm	80
Length (L)	mm	104
P/L		0.77
W	$10^{-4}J$	307

Test Baking (Long Term Fermentation)

Mixing Time	min	7.0
Power	watt	107.4
Loaf Height	mm	107.0
Loaf Volume	cc	877
Specific Volume	cc/g	6.2

Testing was conducted at Cereals Canada in Winnipeg, Manitoba, a joint venture between Grain Farmers of Ontario and Cereals Canada, following the Methods of Analysis on Cereals Canada's website (https://cerealscanada.ca/analytical-methods/).

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