



Canada Western Red Spring (CWRS) wheat

Harvest quality data for No. 1 CWRS, western prairie aggregates¹

Quality parameter ²	2023		2022	
Wheat				
Test weight, kg/hL	81.6		82.9	
Weight per 1000 kernels, g	33.3		35.5	
Protein content, %	14.2		14.0	
Protein content, % (dry matter basis)	16.4		16.2	
Ash content, %	1.46		1.50	
Falling Number, seconds	414		417	
Particle size index, %	50		49	
Milling flour yield - Bühler Laboratory Mill				
Clean wheat basis, %	76.0		75.6	
Flour, extraction (%) for analysis	74	60	74	60
Protein content, %	13.6	13.5	13.1	13.0
Protein loss, %	0.6	0.7	0.9	1.0
Wet gluten content, %	37.5	36.1	34.4	35.1
Gluten index, %	95.0	97.3	94.7	95.4
Ash content, %	0.43	0.39	0.44	0.40
Dough sheet brightness (L*) at 2h ³	76.7	78.2	76.6	77.2
Dough sheet redness (a*) at 2h ³	2.0	1.6	1.7	1.6
Dough sheet yellowness (b*) at 2h ³	26.1	25.8	25.5	26.0
Starch damage, %	7.9	7.7	8.3	8.3
Amylograph peak viscosity, BU	631	663	711	713
Farinogram, 50 g bowl				
Absorption, %	65.8	65.1	65.3	65.0
Dough development time, minutes	7.6	8.7	6.2	7.3
Stability, minutes	11.9	25.7	9.8	14.7
Mixing tolerance index, BU	22	9	20	17
Farinogram, 300 g bowl⁴				
Absorption, %	66.6	65.5	66.2	65.8
Dough development time, minutes	7.0	11.5	6.7	8.9
Stability, minutes	16.5	47.5	12.7	35.6
Mixing tolerance index, BU	10	0	15	8
Extensogram (135 minutes)				
Maximum resistance, BU	555	796	553	631
Extensibility (length), cm	20.5	18.6	20.0	20.1
Area, cm ²	146	183	140	160
Alveogram				
P (maximum over pressure), mm H ₂ O	124	130	121	131
L (length), mm	121	110	126	122
P/L	1.02	1.18	0.96	1.07
W (deformation energy), 10 ⁻⁴ joules	509	505	483	511
le (elasticity index), %	63.7	64.1	60.6	60.8



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Baking (Canadian short process)				
Absorption, %	69	69	68	68
Mixing time, minutes	5.2	5.4	4.4	4.7
Mixing energy, Wh/kg	14.2	13.9	11.3	11.8
Loaf volume, cm ³ /100 g flour	969	970	1005	1016
Baking (Sponge and dough)				
Absorption, %	65	65	63	63
Mixing time, minutes	3.5	3.7	3.9	4.1
Mixing energy, Wh/kg	6.5	6.4	6.3	6.3
Loaf volume, cm ³ /100 g flour	1042	1059	1029	1034

¹ No. 1 CWRS samples were obtained from the Canadian Grain Commission's Harvest Sample Program. Western prairies aggregate region includes British Columbia, Alberta and western Saskatchewan (regions 5, 7-10 on crop region map).

² Data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for flour, except Alveogram results which are reported on a 15% moisture basis. More information is available on wheat methods and tests.

³ Colour measured with Minolta CR-410 with D65 illuminant. More information is available on wheat methods and tests.

⁴ New parameter starting 2022 (Farinograph results were historically generated with only a 50 g bowl).