



Wheat, No. 1 and 2 Canada Western Red Spring (CWRS) Export cargo aggregates by grade

Quality parameter ²	First quarter 2023-2024 crop year ¹			
	Atlantic		Pacific	
	No. 1 CWRS	No. 2 CWRS	No. 1 CWRS	No. 2 CWRS
Wheat				
Test weight, kg/hL	83.6	83.3	83.4	82.7
Weight per 1000 kernels, g	36.1	34.3	31.7	33.4
Protein content, %	14.2	13.9	13.8	13.8
Protein content, % (dry matter basis)	16.5	16.1	15.9	16.0
Ash content, %	1.57	1.53	1.43	1.44
Falling Number, seconds	421	360	391	415
Particle size index, %	51	52	54	51
Milling flour yield - Bühler laboratory mill				
Clean wheat basis, %	76.5	76.4	77.0	76.7
Flour, extraction (%) for analysis	74	74	74	60
Protein content, %	13.3	13.1	13.1	13.1
Wet gluten content, %	36.5	34.7	35.6	35.2
Gluten index, %	93.5	96.4	96.8	95.6
Ash content, %	0.45	0.44	0.42	0.42
Dough sheet (water) brightness (L*) at 2h ³	76.2	76.1	76.5	77.4
Dough sheet (water) redness (a*) at 2h ³	2.0	2.0	1.9	1.6
Dough sheet (water) yellowness (b*) at 2h ³	25.7	25.4	25.5	25.7
Starch damage, %	7.9	8.1	8.1	7.6
Amylograph peak viscosity, BU	561	518	559	645
Farinogram, 50 g bowl				
Absorption, %	64.0	63.3	64.4	63.9
Dough development time, minutes	6.5	7.5	7.7	8.3
Stability, minutes	9.6	11.1	9.8	20.1
Mixing tolerance index, BU	24	27	28	15
Farinogram, 300 g bowl				
Absorption, %	65.0	64.7	65.5	65.1
Dough development time, minutes	7.5	6.4	7.8	8.4
Stability, minutes	14.8	14.8	15.2	43.0
Mixing tolerance index, BU	14	14	14	10
Extensogram (135 minutes) ⁴				
Maximum resistance, BU	619	638	674	771
Extensibility (length), cm	19.7	19.9	19.0	19.2
Area, cm ²	153	160	160	183
Alveogram				
P (maximum over pressure), mm H ₂ O	108	116	127	134
L (length), mm	132	125	120	112
P/L	0.82	0.93	1.06	1.20
W (deformation energy), x 10 ⁻⁴ joules	453	474	505	509
le (elasticity index), %	61.2	62.1	62.2	62.3



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Baking (Canadian short process)					
Absorption, %	68	67	68	68	68
Mixing time, minutes	4.9	5.0	5.0	5.2	5.1
Mixing energy, Wh/kg	13.1	13.1	13.0	13.7	13.7
Loaf volume, cm ³ /100 g flour	1019	1001	1040	1033	1006
Baking (Sponge and Dough)					
Absorption, %	NA ⁵	NA	63	63	NA
Mixing time, minutes	NA	NA	4.1	4.2	NA
Mixing energy, Wh/kg	NA	NA	6.7	6.9	NA
Loaf volume, cm ³ /100 g flour	NA	NA	1048	1045	NA

¹ First quarter cargo aggregates were made from loading samples of export shipments in the months of August, September, and October of 2023, which may include CWRS crop grown in 2022.

² Data are reported on a 13.5% moisture basis for wheat and 14.0% moisture basis for flour, except Alveogram results are reported on a 15.0% moisture basis. For more information see [wheat methods and tests](#).

³ Colour measured with Minolta CR-410 with D65 Illuminant. More information is available on [wheat methods and tests](#).

⁴ Extensogram results were generated from dough mixed using the 2024 Farinograph model mixer. Historically, the Farinograph-E model mixer was used for mixing dough.

⁵ Not available.