

Canada Western Amber Durum (CWAD) wheat

Harvest quality data for No. 1, No. 2, No. 3 and No. 4 CWAD, prairie aggregates ¹

Quality parameter ²	2024			2023		
	No. 1 CWAD	No. 2 CWAD	No. 4 CWAD	No. 1 CWAD	No. 2 CWAD	No. 3 CWAD
Wheat						
Test weight, kg/hL	81	79	77	81	79	79
Weight per 1000 kernels, g	38.2	33.3	30.9	37.2	36.8	37.4
Vitreous kernels, %	92	82	82	95	86	78
Protein content, %	14.1	15.3	16.8	14.7	14.6	15.0
Ash content, %	1.61	1.70	1.75	1.44	1.51	1.55
Falling Number, sec	473	434	427	438	428	379
Cadmium content, mg/kg	0.055	0.054	0.060	0.067	0.068	0.063
Milling - Allis-Chalmers Mill						
Total milling yield, %	72.1	71.3	69.2	73.2	72.4	71.6
Semolina yield, %	64.4	63.2	61.1	65.9	65.5	64.9
Semolina³						
Protein content, %	13.4	14.2	15.8	14.0	14.0	14.2
Protein loss, %	0.7	1.1	1.0	0.7	0.6	0.8
Wet gluten content, %	33.9	35.0	37.9	34.7	33.5	34.5
Gluten index, %	84	88	88	80	79	72
Ash content, %	0.77	0.81	0.85	0.72	0.75	0.77
Yellow pigment content, ppm	11.2	11.5	11.7	10.8	11.0	11.4
Yellowness, b*	33.6	32.8	32.7	33.2	33.0	32.5
Granulation						
> 425 µm, %	9.7	9.3	8.9	8.1	8.6	8.6
> 250 µm, %	58.4	56.6	55.0	60.0	60.1	58.5
> 180 µm, %	18.9	19.2	19.4	18.5	17.5	17.7
> 150 µm, %	5.5	5.8	6.2	6.2	6.1	6.3
< 150 µm, %	7.6	9.1	10.6	7.2	7.6	9.0
Semolina speck count per 50 cm²						
Total specks	9	9	4	8	11	14
Dark specks	1	2	0	1	3	2
Large specks (≥ 0.06 mm ²)	4	4	2	3	5	7
Alveogram⁴						
P (maximum over pressure), mm H ₂ O	93	94	105	94	96	98
L (length), mm	96	96	103	87	83	82
P/L	0.97	0.98	1.02	1.08	1.16	1.20
W (deformation energy), 10 ⁻⁴ joules	269	276	335	245	243	242
le (elasticity Index), %	51.3	52.4	55.4	48.3	47.9	47.1
Spaghetti colour dried at 85°C						
Brightness, L*	71.3	70.1	69.8	71.1	70.4	69.8
Redness, a*	6.8	7.7	8.1	7.2	7.8	8.5
Yellowness, b*	65.8	65.4	65.3	64.0	64.0	63.7
Spaghetti texture dried at 85°C						
Peak cutting force, g	601	641	757	697	680	676
Dry strand diameter, mm	1.71	1.71	1.72	1.71	1.71	1.71
Cooked strand diameter, mm	2.52	2.52	2.52	2.53	2.53	2.53

¹ Prairie aggregates are from all durum producing regions in Saskatchewan and Alberta. In 2024, No. 2 CWAD and No. 4 CWAD were downgraded due to test weight. Based on the Official Grain Grading Guide's export grade determination table for CWAD, the minimum test weight for No. 1, No. 2, No. 3 and No. 4 CWAD is 80 kg/hL, 79 kg/hL, 78 kg/hL and 75 kg/hL, respectively.

² Data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for semolina, except Alveogram results which are reported on a 15% moisture basis.

³ Semolina analysis is conducted using granular products with a constant extraction rate of 70%.

⁴ Alveogram results from the Chopin Alveolab.