# Wheat, by Specification

This wheat composite represents the quality that could be expected in a shipment by specification of a medium protein wheat from Western Canada. The term "Wheat, by Specification" is not an official wheat class and can sometimes be referred to as CP+, Western Canadian Wheat (WCW) or Other. Discussions regarding quality expectations are held between the exporter/seller and buyer to determine specifications instead of utilizing grade standards. This may result in quality differences between customers.

## 2025 EXECUTIVE SUMMARY

### Advice from an Expert

This wheat composite offers good water absorption and gluten strength.

### Grading Factors

Limits (min. or max.) for specific grading factors may be based on grade standards for an official wheat class and could be part of the specification between the exporter/seller and buyer.

### Protein

This wheat composite represents a medium protein wheat with a wheat protein content of 12.9% (13.5% moisture basis).

### Milling Quality

This wheat composite has good milling performance with high test weight and thousand kernel weight.

### Application Performance

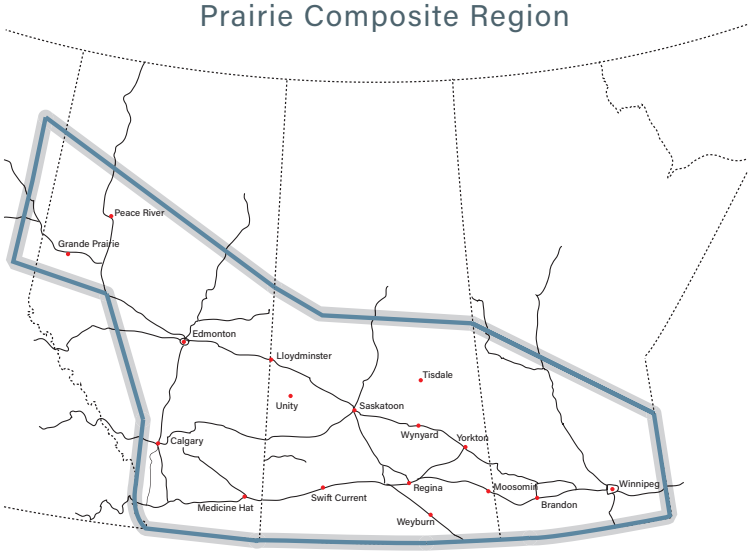
Flour milled from this wheat composite has good processing quality resulting in pan bread with very good loaf volume and acceptable noodle quality.

PRAIRIE COMPOSITE

## Wheat, by Specification

| Quality Parameter [a] | Prairie Composite [b] | | |
|---|---|---|---|
| Wheat | 2025 | 2024[d] | 5 yr avg.[d] |
| Test Weight, kg/hL | 84 | 83 | 83 |
| Weight Per 1000 Kernels, g | 38.0 | 34.4 | 38.3 |
| Protein Content, % | 12.9 | 12.7 | 13.1 |
| Protein Content, % (dry matter basis) | 14.9 | 14.7 | 15.1 |
| Wet Gluten Content, % | 30.3 | 29.3 | 30.2 |
| Gluten Index, % | 85 | 94 | 90 |
| Ash Content, % | 1.42 | 1.46 | 1.43 |
| Falling Number, s | 378 | 383 | 394 |
| Particle Size Index[c], % | 57 | 55 | - |
| Milling Flour Yield Bühler Laboratory Mill | | | |
| Total Products Basis, % | 74.9 | 74.8 | 75.0 |
| 0.50% Ash Basis, % | 78.4 | 78.8 | 77.5 |

FIGURE 2
2025 Western Canada Prairie Composite Region




[a] Data are reported on a 13.5% moisture basis.

[b] Refer to crop region map (Figure 2).

[c] Unable to calculate 5-year average for particle size index due to change in method.

[d] Values represent the 2024 CPSR composite data and the 5-year average is calculated using the 2021-24 CPSR composite data plus 2025 Wheat, by Specification composite data.

Harvest assessment composites represent grain available for export and were prepared from samples received up to October 16, 2025. Composites were graded according to Export Grade Determination Tables in the Official Grain Grading Guide (https://www.grainscanada.gc.ca/en/grain-quality/official-grain-grading-guide/). Milling, analytical and end-product analysis was conducted by Cereals Canada following the Methods of Analysis on Cereals Canada's website (https://cerealscanada.ca/analytical-methods/).

# Wheat, by Specification[b]

| Flour[a] | 2025 | | 2024[d] | | 5-Year Average[d] | |
|---|---|---|---|---|---|---|
| Extraction | Straight Grade 74.9% | 74% | Straight Grade 74.8% | 74% | Straight Grade 75.0% | 74% |
| Protein Content, % | 12.1 | 12.0 | 11.9 | 11.8 | 12.3 | 12.1 |
| Protein Loss, % | 0.8 | 0.9 | 0.8 | 0.9 | 0.8 | 0.9 |
| Wet Gluten Content, % | 31.7 | 31.7 | 30.2 | 29.6 | 31.1 | 31.5 |
| Gluten Index, % | 97 | 97 | 99 | 99 | 98 | 98 |
| Ash Content, % | 0.43 | 0.41 | 0.42 | 0.40 | 0.45 | 0.42 |
| Colour, L* (wet) | 84.7 | 85.2 | 85.3 | 85.4 | 84.7 | 85.1 |
| Starch Damage, UCD | 24.5 | 24.3 | 23.8 | 24.3 | 24.1 | 24.1 |
| Amylograph Peak Viscosity, BU | 667 | 655 | 706 | 729 | 612 | 632 |
| Farinograph | | | | | | |
| Absorption, % | 61.5 | 61.6 | 60.0 | 60.2 | 61.9 | 61.8 |
| Dough Development Time, min | 7.0 | 5.8 | 7.9 | 9.0 | 7.1 | 7.3 |
| Stability, min | 19.0 | 21.6 | 49.3 | 52.9 | 22.9 | 26.4 |
| Mixing Tolerance Index, BU | 17 | 15 | 9 | 8 | 18 | 14 |
| Extensograph (135 min) | | | | | | |
| Max. Resistance (Rmax), BU | 730 | 662 | 840 | 906 | 705 | 737 |
| Extensibility (length), cm | 18.3 | 19.2 | 18.7 | 18.7 | 19.5 | 19.2 |
| Area, $cm^2$ | 162 | 161 | 196 | 205 | 171 | 176 |
| Alveograph | | | | | | |
| P (height x 1.1), mm | 111 | 116 | 108 | 116 | 114 | 116 |
| L (length), mm | 124 | 111 | 171 | 153 | 132 | 136 |
| P/L | 0.90 | 1.05 | 0.63 | 0.76 | 0.89 | 0.87 |
| W, $10^{-4}$ J | 446 | 423 | 573 | 568 | 497 | 515 |
| Ie, % | 60.6 | 60.0 | 63.8 | 64.0 | 64.3 | 64.3 |
| Baking (No Time Dough) | | | | | | |
| Absorption, % | 66 | - | 65 | - | 66 | - |
| Mixing Time, min | 6.8 | - | 8.3 | - | 6.9 | - |
| Specific Volume, $cm^3/g$ | 7.4 | - | 7.2 | - | 7.3 | - |
| Total Bread Score (out of 10) | 8.9 | - | 8.9 | - | 9.1 | - |
| Crumb Colour, L* | 80.2 | - | 80.5 | - | 80.0 | - |
| Baking (Sponge & Dough) | | | | | | |
| Absorption, % | 65 | - | 64 | - | 65 | - |
| Mixing Time, min | 8.0 | - | 8.4 | - | 7.7 | - |
| Specific Volume, $cm^3/g$ | 7.0 | - | 6.6 | - | 7.0 | - |
| Total Bread Score (out of 10) | 9.2 | - | 9.6 | - | 9.5 | - |
| Crumb Colour, L* | 82.1 | - | 82.3 | - | 81.9 | - |
| Noodles (Fresh White Salted) | | | | | | |
| Colour (3h / 24h) L* | - | 76.3 / 71.9 | - | 77.3 / 72.4 | - | 75.6 / 70.9 |
| a* | - | 1.31 / 1.68 | - | 1.21 / 1.61 | - | 1.33 / 1.75 |
| b* | - | 24.3 / 23.1 | - | 23.8 / 22.9 | - | 24.2 / 22.9 |
| MCS (3.5 min.)[c], $g/mm^2$ | - | 29.7 | - | 27.9 | - | 27.7 |

[a] Data are reported on a 14.0% moisture basis for flour except Alveograph which is reported on a 15.0% moisture basis and starch damage which is on as is basis.

[b] Refer to crop region map (Figure 2).

[c] Maximum cutting stress of noodles cooked to 3.5 min.

[d] Values represent the 2024 CPSR composite data and the 5-year average is calculated using the 2021-2024 CPSR composite data plus 2025 Wheat, by Specification composite data.