

Reference Material and Inter-laboratory Quality Control Materials Product Summary

September 2023

Version: 1

Assigned Values: Values provided have been generated from an Inter-Laboratory Proficiency Programme (ILPP). The reference material values provided in this summary are the mean of the results after the exclusion of statistical outliers. The Assigned Range provided for the Inter-laboratory QC Materials is the range of test values available for purchase. Each Reference and QC Material comes with a Data Summary Sheet.

Missing Values and Available Tests: For Reference Materials where property values do not meet the statistical criteria, the summary values have not been provided. For this reason, not all tests will be available for every Reference Material of the same matrix. However, if there are 3 or more data points available, an Assigned Value will be provided with the corresponding QC material.

Sample Sizes: Available sample sizes are shown for reference materials.

Reference Materials: Plant Material

| Product Type | Wholegrain Oats | Fava Beans | Red Rice |
|-------------------|-----------------|------------|-----------|
| Product ID | 808-C-1 | 644-C-1 | 832-C-1 |
| Expiry Date | 28 Feb 24 | 28 Feb 25 | 31 May 26 |
| Sample Size | 20g | 20g | 20g |
| Aluminium (mg/kg) | | | 3.55 |
| Boron (mg/kg) | 1.12 | 10.3 | 0.780 |
| Calcium (%w/w) | 0.0512 | 0.101 | 0.0081 |
| Carbon (%w/w) | 46.3 | | 42.2 |
| Chloride (mg/kg) | 476 | | 225 |

| | | | |
|---------------------------|-------|-------|--------|
| Cobalt (µg/kg) | | | 22.2 |
| Copper (mg/kg) | 3.94 | 7.88 | 2.57 |
| Iron (mg/kg) | | 46.8 | 8.39 |
| Magnesium (%w/w) | 0.127 | 0.135 | 0.0850 |
| Manganese (mg/kg) | 50.0 | | 15.4 |
| Molybdenum (µg/kg) | 1,079 | | 483 |
| Nitrogen (%w/w) | 1.72 | 4.33 | 1.58 |
| Phosphorus (%w/w) | 0.393 | 0.329 | 0.248 |
| Potassium (%w/w) | 0.369 | 1.05 | 0.176 |
| Selenium (µg/kg) | 140 | | 38.2 |
| Sodium (mg/kg) | 22.9 | 181 | 6.10 |
| Sulphur (%w/w) | 0.143 | 0.177 | 0.128 |
| Zinc (mg/kg) | 17.6 | 28.6 | 18.3 |

QC Material: Plant Material

| Matrix: Plant Material | Product ID | 10596-QC | 10849-QC | 12307-QC | 12959-QC | 12815-QC |
|------------------------------|----------------------------------|-----------|-----------|-----------|-----------|-----------|
| | Process Run | PR11055 | PR11057 | PR11058 | PR11056 | PR10821 |
| | Expiry Date | 28 Feb 25 | 30 May 25 | 31 Aug 26 | 31 Aug 26 | 01 May 28 |
| | Sample Size | 20g | 20g | 20g | 20g | 20g |
| | Aluminium (mg/kg) | 131 | 311 | 2.03 | 1.93 | 261 |
| | Boron (mg/kg) | 45.0 | 14.9 | 6.64 | 0.720 | 5.84 |
| | Cadmium (µg/kg) | 7.80 | 1080 | 19.6 | 18.0 | 53.5 |
| | Calcium (%w/w) | 0.980 | 1.40 | 0.0390 | 0.0100 | 0.296 |
| | Carbon (%w/w) | 49.6 | 40.5 | 43.6 | 43.5 | 44.5 |
| | Chloride (mg/kg) | 1600 | 2710 | 282 | 314 | 4190 |
| | Cobalt (µg/kg) | 1330 | 191 | 47.8 | 9.83 | 80.0 |
| | Copper (mg/kg) | 8.73 | 9.06 | 5.67 | 4.40 | 4.51 |
| | Iron (mg/kg) | 155 | 345 | 40.7 | 11.6 | 195 |
| | Lead (µg/kg) | 69.0 | 226 | 4.03 | 3.00 | 120 |
| | Magnesium (%w/w) | 0.211 | 0.825 | 0.109 | 0.124 | 0.137 |
| | Manganese (mg/kg) | 196 | 141 | 12.1 | 24.9 | 54.3 |
| | Molybdenum (µg/kg) | 22.1 | 277 | 2380 | 169 | 368 |
| | Nitrate Nitrogen (mg /kg) | 432 | 987 | 3.25 | 1.18 | 137 |
| | Nitrogen (%w/w) | 3.15 | 4.23 | 3.80 | 1.34 | 1.25 |
| | Phosphorus (%w/w) | 0.122 | 0.383 | 0.383 | 0.343 | 0.188 |
| | Potassium (%w/w) | 2.10 | 5.90 | 1.04 | 0.283 | 1.11 |



| | | | | | |
|-------------------------|-------|-------|-------|--------|-------|
| Selenium (µg/kg) | 49.8 | 28.0 | 933 | 17.0 | 34.2 |
| Sodium (mg/kg) | 11.3 | 91.7 | 17.2 | 13.9 | 400 |
| Sulphur (%w/w) | 0.202 | 0.438 | 0.130 | 0.0930 | 0.109 |
| Zinc (mg/kg) | 7.53 | 95.4 | 20.8 | 21.2 | 25.6 |