

## Reference Material and Inter-laboratory Quality Control Materials Product Summary

February 2024

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.

*Ordering Reference Materials and/or Quality Control Materials, acknowledges you have read and understood our terms and conditions. These can be found at: <https://www.global-proficiency.com/terms-conditions>*

### Reference Materials: Plant Material

Product Type	Fava Beans	Black Lentils	Red Rice	Olive Leaves
Product ID	644-C-1	880-C-1	832-C-1	881-C-1
Expiry Date	28 Feb 25	30 May 26	31 May 26	31 Aug 26
Sample Size	20g	20g	20g	20g
Aluminium (mg/kg)			3.55	313
Boron (mg/kg)	10.3	8.42	0.780	23.5
Calcium (%w/w)	0.101	0.0584	0.0081	1.98
Carbon (%w/w)		43.8	42.2	50.6

Chloride (mg/kg)		877	225	970
Cobalt (µg/kg)		57.0	22.2	
Copper (mg/kg)	7.88	10.1	2.57	
Iron (mg/kg)	46.8		8.39	289
Magnesium (%w/w)	0.135	0.100	0.0850	0.285
Manganese (mg/kg)		12.7	15.4	18.4
Molybdenum (µg/kg)		3,062	483	95.3
Nitrate Nitrogen (mg/kg)				5.85
Nitrogen (%w/w)	4.33	4.56	1.58	1.92
Phosphorus (%w/w)	0.329	0.338	0.248	0.186
Potassium (%w/w)	1.05	0.850	0.176	
Selenium (µg/kg)		4,343	38.2	75.1
Sodium (mg/kg)	181	5.54	6.10	235
Sulphur (%w/w)	0.177	0.229	0.128	0.200
Zinc (mg/kg)	28.6	41.4	18.3	29.9

**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
	<b>Aluminium (mg/kg)</b>	131	311	2.03	1.93	261
	<b>Boron (mg/kg)</b>	45.0	14.9	6.64	0.720	5.84
	<b>Cadmium (µg/kg)</b>	7.80	1080	19.6	18.0	53.5
	<b>Calcium (%w/w)</b>	0.980	1.40	0.0390	0.0100	0.296
	<b>Carbon (%w/w)</b>	49.6	40.5	43.6	43.5	44.5
	<b>Chloride (mg/kg)</b>	1600	2710	282	314	4190
	<b>Cobalt (µg/kg)</b>	1330	191	47.8	9.83	80.0
	<b>Copper (mg/kg)</b>	8.73	9.06	5.67	4.40	4.51
	<b>Iron (mg/kg)</b>	155	345	40.7	11.6	195
	<b>Lead (µg/kg)</b>	69.0	226	4.03	3.00	120
	<b>Magnesium (%w/w)</b>	0.211	0.825	0.109	0.124	0.137
	<b>Manganese (mg/kg)</b>	196	141	12.1	24.9	54.3
	<b>Molybdenum (µg/kg)</b>	22.1	277	2380	169	368
	<b>Nitrate Nitrogen (mg/kg)</b>	432	987	3.25	1.18	137
	<b>Nitrogen (%w/w)</b>	3.15	4.23	3.80	1.34	1.25
	<b>Phosphorus (%w/w)</b>	0.122	0.383	0.383	0.343	0.188
	<b>Potassium (%w/w)</b>	2.10	5.90	1.04	0.283	1.11

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