Reference Material and Inter-laboratory Quality Control Materials
Product Summary

May 2019

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	Brown Rice	Bay Leaves	Barley	Wholegrain Oats	Rice Leaves	Lentils
Product ID	322-C-1	321-C-1	176-C-2	395-C-1	38-C-3	28-C-3
Expiry Date	1 Oct 19	28 Feb 20	31 May 20	31 Oct 20	19 Jan 21	31 May 21
Sample Size	125g	125g	125g	125g	125g	125g
Aluminium (mg/kg)		129			63.3	
Boron (mg/kg)				1.54	7.07	7.19
Calcium (%w/w)	0.0099	0.958	0.0303	0.0446	0.308	0.0647
Copper (mg/kg)	2.48	6.84	6.05	5.14	5.98	8.35

Iron (mg/kg)	25.1	119	46.2		119	72.2
Magnesium (%w/w)			0.107	0.119	0.157	
Manganese (mg/kg)	21.2			44.7		12.3
Nitrogen (%w/w)	1.39		1.87	2.09	2.58	3.94
Phosphorus (%w/w)	0.295	0.160	0.288	0.390	0.286	0.292
Potassium (%w/w)	0.213	1.03	0.356		2.29	0.901
Sulphur (%w/w)	0.118	0.149	0.137	0.185	0.182	
Zinc (mg/kg)	17.0	79.7	19.6	21.4	23.7	38.5

QC Material: Plant Material

Matrix: Plant Material	Product ID	3167-QC	6212-QC	6211-QC	6111-QC	7021-QC	6561-QC	7885-QC
	Process Run	PR4401	PR2858	PR4932	PR6399	PR7719	PR5366	PR6399
	Expiry Date	31 Oct 19	31 Oct 19	28 Feb 20	31 May 20	19 Jan 21	31 May 21	01 Feb 23
	Sample Size	125g	125g	125g	125g	125g	125g	125g
	Aluminium (mg/kg)	16.2	185	124	3200	70.1	13.4	1095
	Boron (mg/kg)	0.942	46.7	18.2	6.63	60.3	7.10	20.9
	Cadmium (µg/kg)	38.3	15.0	368	43.0	8.57	8.77	48.4
	Calcium (%w/w)	0.0100	1.56	0.967	0.512	2.27	0.0640	0.576
	Carbon (%w/w)	43.3	44.7	50.0	40.3	42.3	43.8	48.7
	Chloride (mg/kg)	310	745	599	13350	3805	1045	1195
	Cobalt (µg/kg)	42.4	80.6	81.6	2960	31.0	183	109
	Copper (mg/kg)	2.44	51.1	6.65	9.45	7.23	8.19	7.59
	Iron (mg/kg)	24.8	158	117	3595	96.9	73.4	503
	Lead (µg/kg)	21.3	208	242	308	277	18.7	171
	Magnesium (%w/w)	0.123	0.331	0.125	0.356	0.370	0.102	0.264
	Manganese (mg/kg)	20.5	14.9	142	153	44.6	12.3	290
	Molybdenum (µg/kg)	491	681	140	759	182	2530	253
	Nitrate Nitrogen (mg/kg)	3.13	428	6.90	350	19.9	3.65	13.4
	Nitrogen (%w/w)	1.42	3.14	1.82	1.77	2.71	3.96	3.36
	Phosphorus (%w/w)	0.287	0.256	0.161	0.341	0.178	0.285	0.260

	Potassium (%w/w)	0.213	3.08	0.998	2.19	1.47	0.870	1.38
	Selenium (µg/kg)	60.3	42.0	31.6	90.0	484	1435	37.7
	Sodium (mg/kg)	10.0	0.0080	221	4595	61.9	10.6	87.5
	Sulphur (%w/w)	0.113	0.250	0.144	0.246	0.167	0.183	0.258
	Zinc (mg/kg)	17.0	18.6	77.2	51.5	15.3	37.2	112