

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: Soil Material

Product Type	Soil	Soil	Soil	Soil
Product ID	650-C-1	803-C-1	804-C-1	805-C-1
Expiry Date	30 Jun 25	31 Jan 27	30 Jun 27	30 Sep 27
Sample Size	150g	150g	150g	150g
CaCl ₂ Extractable B (mg/kg)	0.863			
Colwell P (mg/kg)	64.3			
Electrical Cond (dS/m)	0.233	0.0684	0.345	
Exch Calcium (cmol+/kg)	15.0			

Exch Magnesium (cmol+/kg)	4.79	1.09		
Exch Potassium (cmol+/kg)	0.575	0.744	0.750	
Exch Sodium (cmol+/kg)	0.0497			
Ext Iron (mg/kg)	84.6			
Ext Manganese (mg/kg)	72.9			
Organic Carbon W&B (%)	1.60			
PBI Colwell (L/kg)	69.9			
pH CaCl ₂ (pH units)		4.12	6.74	7.02
pH Water (pH units)	6.47		7.32	7.46
Total Carbon (%)	1.88	0.945	2.12	3.82
Total Nitrogen (%)	0.188	0.0801	0.137	0.253
Total Organic Carbon (%)			2.13	3.58
Total Phosphorus (%)		0.0413	0.0224	0.0444
Water Ext Cl (mg/kg)				528

QC Material: Soil Material

Matrix: Soil Material	Product ID	12905-QC	13039-QC	13040-QC	13957-QC	13950-QC	13953-QC	13956-QC	13958-QC	13959-QC
	Process Run	PR10728	PR10728	PR10730	PR10916	PR10916	PR11098	PR11098	PR11098	PR11098
	Expiry Date	31 Jan 27	30 Jun 27	30 Sep 27	05 Jun 28	06 Jun 28	11 Sep 28	11 Sep 28	11 Sep 28	11 Sep 28
	Sample Size	150g	150g	150g	150g	150g	150g	150g	150g	150g
	Acid P (mg/kg)	42.3	90.0	301	10.1	356	321	643	53.3	6.20
	Bray P (mg/kg)	20.3	36.3	97.4	7.82	58.3	80.4	170	13.2	1.87
	CaCl ₂ Extractable B (mg/kg)	0.523	0.810	1.54	0.500	2.66	2.17	2.14	0.521	1.05
	Colwell P (mg/kg)	52.5	45.9	136	14.8	215	168	278	29.0	16.0
	Electrical Cond (dS/m)	0.0680	0.340	0.981	0.0940	0.131	0.266	1.16	0.322	0.529
	Exch Aluminium (cmol+/kg)	0.983	0.0100	0.0140	0.454	0.0180	0.0190	0.0160	0.0120	0.0110
	Exch Calcium (cmol+/kg)	1.80	7.81	11.5	1.65	13.7	15.0	9.51	13.6	23.0
	Exch Magnesium (cmol+/kg)	1.14	1.80	3.22	0.916	1.17	4.21	3.67	2.13	6.99
	Exch Potassium (cmol+/kg)	0.745	0.744	2.99	0.145	0.800	1.27	4.07	0.277	1.73
	Exch Sodium (cmol+/kg)	0.110	0.854	1.34	0.152	0.231	0.331	1.89	0.330	0.704
	Ext Copper (mg/kg)	2.03	1.60	2.08	0.408	2.05	1.71	3.44	1.03	3.30
	Ext Iron (mg/kg)	78.3	134	145	390	47.8	87.2	185	99.2	84.5
	Ext Manganese (mg/kg)	194	9.50	24.8	7.22	153	51.3	25.0	8.48	22.9
	Ext Sulphur (mg/kg)	27.0	56.6	273	15.9	51.8	81.8	189	97.0	213
	Ext Zinc (mg/kg)	3.58	15.1	20.2	2.44	10.2	16.3	30.9	9.32	12.4
	Olsen P (mg/kg)	17.5	18.2	51.6	8.40	62.8	68.2	84.4	11.9	5.61
	Organic Carbon W&B (%)	0.768	1.89	3.38	1.83	3.69	3.76	3.48	1.51	1.23

	PBI Colwell (L/kg)	97.7	60.3	74.7	71.0	623	60.5	98.7	82.0	153
	pH CaCl2 (pH units)	4.09	6.74	7.02	4.39	5.60	6.22	7.07	7.66	7.40
	pH Water (pH units)	4.88	7.30	7.45	5.06	6.30	6.74	7.65	8.12	7.75
	Total Carbon (%)	0.939	2.10	3.73	1.97	4.47	4.25	3.73	1.66	1.48
	Total Nitrogen (%)	0.0760	0.134	0.240	0.115	0.340	0.249	0.329	0.110	0.154
	Total Organic Carbon (%)	0.902	2.06	3.59	1.87	4.40	4.03	3.71	1.57	1.33
	Total Phosphorus (%)	0.0420	0.0220	0.0430	0.0080	0.165	0.0570	0.0790	0.0170	0.0180
	Water Ext Cl (mg/kg)	8.16	183	496	24.5	34.0	41.0	917	39.8	16.2