

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

February 2025

Version: 1

**Assigned Values:** Values provided have been generated from Inter-Laboratory Proficiency Programmes (ILPP) or from data provided by laboratories for the purpose of characterisation. 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>*

*Note: When ordering QC materials, please quote both the Product ID AND the process run (PR) number.*

### QC Material: Fertiliser - Phosphate Rock

Matrix: Fertiliser	Product ID Process Run Expiry Date Sample Size	13845-QC PR10409 5 Apr 27 125g	13846-QC PR10409 5 Apr 27 125g	14390-QC PR11765 9 Oct 28 125g	14391-QC PR11765 9 Oct 28 125g
	<b>Cadmium (mg/kg)</b>	31.81	25.34	28.40	28.56
	<b>Calcium (g/100g)</b>	36.33	24.74	37.26	36.89
	<b>Citric Acid Soluble P (g/100g)</b>	3.58	2.45	3.91	3.89
	<b>Fluoride (%)</b>	3.99	1.62	3.87	3.88
	<b>Formic Acid Soluble P (g/100g)</b>	6.65	3.01	6.13	5.27
	<b>Grist Test (% Pass)</b>			61.66	61.97
	<b>Lead (mg/kg)</b>	4.84	20.73	5.42	5.27
	<b>Mercury (mg/kg)</b>	0.02	0.12	0.05	0.04

	<b>Moisture (g/100g)</b>	1.10	0.97	0.68	0.71
	<b>Total Phosphorus (g/100g)</b>	15.26	14.12	15.52	15.49

**QC Material: Fertiliser - Potassic Super**

<b>Matrix: Fertiliser</b>	<b>Product ID Process Run Expiry Date Sample Size</b>	13843-QC PR11054 5 Apr 27 125g	13844-QC PR11054 5 Apr 27 125g	14388-QC PR11660 7 Aug 28 125g	14389-QC PR11660 7 Aug 28 125g
	<b>Cadmium (mg/kg)</b>	11.86	14.43	15.85	15.29
	<b>Calcium (g/100g)</b>	16.76	19.91	17.00	14.74
	<b>Citric Acid Soluble P (g/100g)</b>	6.05	7.17	6.26	5.61
	<b>Fluoride (%)</b>	1.63	1.93	1.77	1.46
	<b>Free Acid (as H<sub>3</sub>PO<sub>4</sub>) (g/100g)</b>		1.87		
	<b>Free Acid (as P) (g/100g)</b>	0.49	0.57	0.63	0.67
	<b>Moisture (g/100g)</b>	4.48	5.09	5.86	5.24
	<b>Potassium (g/100g)</b>	14.98	7.66	8.95	15.19
	<b>Sulphate-Sulphur(as S)(g/100g)</b>	7.85	9.30	9.29	8.02
	<b>Total Phosphorus (g/100g)</b>	6.91	8.22	7.51	6.46
	<b>W-Soluble Phosphorus (g/100g)</b>	5.55	6.66	5.77	4.93

**QC Material: Fertiliser - Serpentine Super**

<b>Matrix: Fertiliser</b>	<b>Product ID</b>	11397-QC	13556-QC	15223-QC	13848-QC
	<b>Process Run</b>	PR11053	PR10618	PR12007	PR11330
	<b>Expiry Date</b>	31 Oct 25	28 Feb 27	1 Feb 28	28 Feb 28
	<b>Sample Size</b>	125g	125g	125g	125g
	<b>Cadmium (mg/kg)</b>	10.19	12.88	11.41	14.99
	<b>Calcium (g/100g)</b>	16.02	15.34	17.92	19.18
	<b>Citric Acid Soluble P (g/100g)</b>	5.07	4.83	5.17	5.17
	<b>Fluoride (%)</b>	1.46	1.48	1.67	
	<b>Moisture (g/100g)</b>	3.31	3.28	4.20	4.26
	<b>Sulphate-Sulphur(as S)(g/100g)</b>	8.65	7.74	8.46	8.29
	<b>Total Magnesium (g/100g)</b>	5.27	5.73	5.15	4.95
	<b>Total Phosphorus (g/100g)</b>	6.93	6.66	7.23	7.24
	<b>W-Soluble Phosphorus (g/100g)</b>	1.47	1.23	1.66	1.71

**QC Material: Fertiliser - Sulphur Super**

<b>Matrix: Fertiliser</b>	<b>Product ID</b>	11399-QC	13557-QC	15222-QC	13847-QC
	<b>Process Run</b>	PR11053	PR10618	PR12007	PR11330
	<b>Expiry Date</b>	31 Oct 25	28 Feb 27	1 Feb 28	28 Feb 28
	<b>Sample Size</b>	125g	125g	125g	125g
	<b>Ammonium Citrate P (g/100g)</b>	6.27	6.89		
	<b>Cadmium (mg/kg)</b>	10.76	14.03	12.82	15.60
	<b>Calcium (g/100g)</b>	15.78	16.62	16.17	17.41
	<b>Citric Acid Soluble P (g/100g)</b>	6.12	6.51	6.79	6.83
	<b>Elemental Sulphur (g/100g)</b>	26.73	22.92	22.50	21.52
	<b>Fluoride (%)</b>	1.58	1.63	1.82	1.92
	<b>Free Acid (as H<sub>3</sub>PO<sub>4</sub>) (g/100g)</b>	0.70			
	<b>Free Acid (as P) (g/100g)</b>	0.14	0.14		0.08
	<b>Moisture (g/100g)</b>	2.51	3.82	2.90	1.67
	<b>Sulphate-Sulphur(as S)(g/100g)</b>	8.36	8.63	8.80	8.54
	<b>Total Phosphorus (g/100g)</b>	6.98	6.90	7.37	7.83
	<b>W-Soluble Phosphorus (g/100g)</b>	5.76	6.40	6.31	6.25

**QC Material: Fertiliser - Super Phosphate**

<b>Matrix: Fertiliser</b>	<b>Product ID</b>	13849-QC	13850-QC
	<b>Process Run</b>	PR11660	PR11660
	<b>Expiry Date</b>	7 Aug 28	7 Aug 28
	<b>Sample Size</b>	125g	125g
	<b>Ammonium Citrate P (g/100g)</b>	8.22	8.43
	<b>Cadmium (mg/kg)</b>	16.43	21.40
	<b>Calcium (g/100g)</b>	21.04	21.28
	<b>Citric Acid Soluble P (g/100g)</b>	7.56	7.99
	<b>Fluoride (%)</b>	2.00	2.32
	<b>Free Acid (as P) (g/100g)</b>	0.13	0.09
	<b>Moisture (g/100g)</b>	3.22	3.54
	<b>Sulphate-Sulphur(as S)(g/100g)</b>	11.22	11.17
	<b>Total Phosphorus (g/100g)</b>	9.26	9.29
	<b>W-Soluble Phosphorus (g/100g)</b>	6.60	7.31