

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

August 2022

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.

*Note: When ordering QC materials, please quote both the Product ID AND the process run*

### QC Material: Fertiliser - Phosphate Rock

| Matrix:<br>Fertiliser | Product ID                      | 12864-QC  |
|-----------------------|---------------------------------|-----------|
|                       | Process Run                     | PR9709    |
|                       | Expiry Date                     | 31 Oct 26 |
|                       | Sample Size                     | 125g      |
|                       | Cadmium (mg/kg)                 | 31.35     |
|                       | Calcium (g/100g)                | 37.90     |
|                       | Citric Acid Soluble P (g /100g) | 3.45      |
|                       | Fluoride (%)                    | 4.11      |
|                       | Grist Test (% Pass)             | 5.95      |
|                       | Lead (mg/kg)                    | 3.05      |
|                       | Mercury (mg/kg)                 | 0.03      |
|                       | Moisture (g/100g)               | 0.81      |
|                       | Total Phosphorus (g/ 100g)      | 15.84     |

**QC Material: Fertiliser - Potassic Super**

| Matrix:<br>Fertiliser | Product ID                      | 8970-QC   | 10987-QC  | 11395-QC  | 13843-QC | 13844-QC |
|-----------------------|---------------------------------|-----------|-----------|-----------|----------|----------|
|                       | Process Run                     | PR9551    | PR8700    | PR9551    | PR10283  | PR10283  |
|                       | Expiry Date                     | 23 Aug 23 | 30 Apr 24 | 30 Apr 25 | 5 Apr 27 | 5 Apr 27 |
|                       | Sample Size                     | 125g      | 125g      | 125g      | 125g     | 125g     |
|                       | Cadmium (mg/kg)                 | 10.14     | 9.96      | 7.00      | 11.85    | 14.45    |
|                       | Calcium (g/100g)                | 16.78     | 15.47     | 10.19     | 16.82    | 19.80    |
|                       | Citric Acid Soluble P (g /100g) | 6.18      | 5.60      | 3.74      | 6.03     | 7.16     |
|                       | Fluoride (%)                    | 1.36      | 1.43      | 0.90      | 1.63     | 1.94     |
|                       | Free Acid (as H3PO4) ( g/100g)  | 1.40      | 1.80      | 0.39      |          | 2.00     |
|                       | Free Acid (as P) (g/100g )      | 0.41      | 0.60      | 0.10      | 0.45     | 0.56     |
|                       | Moisture (g/100g)               | 3.82      | 5.39      | 4.43      | 4.48     | 4.74     |
|                       | Potassium (g/100g)              | 11.77     | 14.65     | 25.44     | 15.25    | 7.61     |
|                       | Sulphate-Sulphur(as S) (g/100g) | 8.89      | 8.08      | 5.43      | 7.83     | 9.44     |
|                       | Total Phosphorus (g/ 100g)      | 7.31      | 6.49      | 4.39      | 6.93     | 8.26     |
|                       | W-Soluble Phosphorus (g/100g)   | 5.99      | 5.38      | 3.30      | 5.57     | 6.68     |

**QC Material: Fertiliser - Serpentine Super**

| Matrix:<br>Fertiliser | Product ID                      | 11396-QC  | 11397-QC  |
|-----------------------|---------------------------------|-----------|-----------|
|                       | Process Run                     | PR9401    | PR9983    |
|                       | Expiry Date                     | 31 Oct 24 | 31 Oct 25 |
|                       | Sample Size                     | 125g      | 125g      |
|                       | Cadmium (mg/kg)                 | 11.91     | 10.38     |
|                       | Calcium (g/100g)                | 16.10     | 15.99     |
|                       | Citric Acid Soluble P (g /100g) | 5.17      | 5.05      |
|                       | Fluoride (%)                    | 1.52      | 1.48      |
|                       | Moisture (g/100g)               | 3.28      | 3.44      |
|                       | Sulphate-Sulphur(as S) (g/100g) | 8.74      | 8.63      |
|                       | Total Magnesium (g/ 100g)       | 4.93      | 5.30      |
|                       | Total Phosphorus (g/ 100g)      | 6.68      | 6.95      |
|                       | W-Soluble Phosphorus (g/100g)   | 1.25      | 1.48      |

**QC Material: Fertiliser - Sulphur Super**

| Matrix:<br>Fertiliser | Product ID   | 11398-QC  | 11399-QC  |
|-----------------------|--|-----------|-----------|
|                       | Process Run  | PR9401    | PR9983    |
|                       | Expiry Date  | 31 Oct 24 | 31 Oct 25 |
|                       | Sample Size  | 125g      | 125g      |
|                       | Cadmium (mg/kg)  | 9.90      | 10.97     |
|                       | Calcium (g/100g)   | 16.50     | 16.14     |
|                       | Citric Acid Soluble P (g /100g)                          | 6.05      | 6.09      |
|                       | Elemental Sulphur (g/ 100g)                              | 22.51     | 26.17     |
|                       | Fluoride (%)   | 1.49      | 1.59      |
|                       | Free Acid (as H <sub>3</sub> PO <sub>4</sub> ) ( g/100g) |           | 0.76      |
|                       | Free Acid (as P) (g/100g )                               |           | 0.15      |
|                       | Moisture (g/100g)  | 3.13      | 2.72      |
|                       | Sulphate-Sulphur(as S) (g/100g)                          | 8.75      | 8.28      |
|                       | Total Phosphorus (g/ 100g)                               | 7.04      | 6.97      |
|                       | W-Soluble Phosphorus (g/100g)                            | 5.80      | 5.73      |