

Reference Material and Inter-laboratory Quality Control Materials Product Summary

April 2024

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

QC Material: Water - Synthetic Effluent Water - Base

| Matrix: Water | Product ID | 15822-QC | 15823-QC |
|------------------|--------------------------------|----------|----------|
| | Process Run | PR11428 | PR11428 |
| | Expiry Date | 7 Jun 24 | 7 Jun 24 |
| | Sample Size | 860mL | 860mL |
| | Alkalinity - Total (mg/L) | 83.8 | 129 |
| | Ammonia-N (mg/L) | 3.26 | 6.42 |
| | BOD cBOD (mg/L) | 65.6 | 207 |
| | BOD Total (mg/L) | 64.2 | 218 |
| | Boron (mg/L) | 0.241 | 1.14 |
| | Bromide (mg/L) | 0.103 | 1.38 |
| | Calcium (mg/L) | 6.49 | 21.0 |
| | Carbon - Total Organic (mg/L) | 27.5 | 96.9 |
| | Carbon-NonPurgable Org (mg/L) | 27.4 | 95.2 |
| | Chemical Oxygen Demand (mg/L) | 117 | 385 |
| | Chloride (mg/L) | 31.0 | 65.9 |
| | Conductivity (uS/cm) | 337 | 689 |
| | Fluoride (mg/L) | 0.136 | 2.70 |
| | Hardness - Total (mg/L) | 43.9 | 93.6 |
| | Magnesium (mg/L) | 6.53 | 10.1 |
| | Nitrate-N (mg/L) | 1.36 | 5.24 |
| | Nitrite-N (mg/L) | 0.0348 | |
| | Nitrogen - Organic (mg/L) | 3.84 | 13.3 |
| | Nitrogen - Total (mg/L) | 8.24 | 23.8 |
| | Nitrogen -Tot. Kjeldahl (mg/L) | 6.95 | 19.6 |
| | Nitrogen -Tot. Oxidised (mg/L) | 1.41 | 5.18 |
| | pH - Base Solution (pH units) | 7.63 | 7.36 |
| | pH - Standard (pH units) | 7.39 | 6.48 |

| | | | |
|--|---------------------------------|------|------|
| | Phosphorus - Total (mg /L) | 7.44 | 33.8 |
| | Phosphorus Dis Reactive (mg/L) | 4.36 | 15.1 |
| | Phosphorus Tot Dissol (mg/L) | 7.20 | 29.8 |
| | Potassium (mg/L) | 18.9 | 79.6 |
| | Silica (as SiO2 mg/L) | 12.2 | 41.3 |
| | Sodium (mg/L) | 38.3 | 57.7 |
| | Solids - Tot Suspended (mg/L) | 78.2 | 232 |
| | Solids - Total (mg/L) | 321 | 848 |
| | Solids - Total Volatile (mg/L) | 152 | 363 |
| | Solids - Volatile Susp (mg/L) | | 151 |
| | Solids -Total Dissolved (mg/L) | 225 | 558 |
| | Sulphate (mg/L) | 18.4 | 48.0 |
| | Turbidity (NTU) | 27.4 | |

QC Material: Water - Effluent - Chlorine

| | | |
|--------------------------|------------------------------|-----------|
| Matrix: Water | Product ID | 15828-QC |
| | Process Run | PR11428 |
| | Expiry Date | 13 Aug 24 |
| | Sample Size | |
| | Total Chlorine (mg/L) | 2.03 |

QC Material: Water - Synthetic Effluent Water - Trace Elements

| Matrix: Water | Product ID Process Run Expiry Date Sample Size | 15824-QC PR11428 7 Aug 24 200mL | 15825-QC PR11428 7 Aug 24 200mL |
|------------------|---|--|--|
| | Aluminium (mg/L) | 0.248 | 0.887 |
| | Antimony (mg/L) | 0.0201 | 0.183 |
| | Arsenic (mg/L) | 0.0250 | 0.247 |
| | Barium (mg/L) | 0.0341 | 0.246 |
| | Bismuth (mg/L) | 0.0318 | 0.247 |
| | Cadmium (mg/L) | 0.0195 | 0.193 |
| | Chromium (mg/L) | 0.0291 | 0.289 |
| | Cobalt (mg/L) | 0.0192 | 0.193 |
| | Copper (mg/L) | 0.126 | 1.62 |
| | Iron (mg/L) | 0.517 | 4.02 |
| | Lead (mg/L) | 0.0193 | 0.181 |
| | Lithium (mg/L) | 0.0464 | 0.552 |
| | Manganese (mg/L) | 0.256 | 3.02 |
| | Mercury (mg/L) | 0.0210 | 0.0997 |
| | Molybdenum (mg/L) | 0.301 | 0.613 |
| | Nickel (mg/L) | 0.0241 | 0.237 |
| | Selenium (mg/L) | 0.0506 | 0.500 |
| | Strontium (mg/L) | 0.0755 | 0.754 |
| | Zinc (mg/L) | 0.409 | 1.25 |

