nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

Cyanide QC CRM

Catalog Number: QCI-015
Lot Number: D0126
Manufacture Date: 01/02/26
Certified Date: 01/05/26

Expiration: 01/31/2028
Solvent: Water/NaOH
Hazards: Irritant

Analyte	Study Mean (mg/L)	Certified Concentration (mg/L)	Acceptance Limits (mg/L)
Cyanide	0.475	0.480 ± 0.005	0.360 - 0.600

This quality control CRM was manufactured and certified by NSI Lab Solutions following quality procedures meeting the requirements of ISO/IEC 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org. Acceptance limits are set at current NELAC standards. The study mean is set at the mean of an interlaboratory proficiency testing study with outlier rejection. This CRM is intended to be used to validate analytical methods, for detection limit studies, and analyst proficiency testing.

Storage & Instructions For Use

Store the unopened ampule at 2-8°C. Keep away from light.

Fill a 1000 mL Class A volumetric flask with 900 mL of organic free reagent water.
Adjust the alkalinity of the reagent water to pH.12 with 1-2 mL of 50% NaOH.
Shake the concentrate ampule well then immediately pipet exactly 10.0 mL of the concentrate into the flask.
Bring the flask to volume with reagent water and mix well.
This represents the sample for analysis.

Traceability Information

Analyte Source Materials: All analytes and matrix materials are obtained and verified by NSI from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of NSI CRMs are tracked and documented.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO/IEC 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO/IEC 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO/IEC 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our samples is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO/IEC 17025 accredited calibration laboratory.

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: QCI-015
Lot Number: D0126

Certified Concentration: Certified concentration is the made to manufacture value corrected for the determined analyte purity.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the certified concentration is the expanded uncertainty at 95% confidence interval (CI) with K=2. This expanded uncertainty incorporates contributions from manufacturing, homogeneity, shipping, and long-term stability.

Homogeneity

This quality control CRM was thoroughly mixed in production. Batch homogeneity was established through analyses of samples chosen at random.

Stability/Expiration

The stability of this quality control CRM is based on short-term and long-term monitoring of the certified concentration. The expiration date is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring. Guarantee is applicable to the unopened ampule.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Hunter Fazler

Hunter Fazler, Quality Lead