

Certificate of Analysis

Conductivity Standard, 23.8 $\mu\text{S}/\text{cm}$ at 25°C (11.2 ppm TDS as NaCl)

Lot Number: 4402P72

Product Number: 2236.06

Manufacture Date: FEB 28, 2024

Expiration Date: FEB 2025

For use as a Total Dissolved Solids (TDS) standard: As Salt Water Ions 11.2 ppm as NaCl and 11.3 ppm as KCl; As Fresh Water Ions, 16 ppm as EPA/APHA, 15 ppm as "442".

| Name | CAS# | Grade |
|-----------------|-----------|-----------------|
| Water | 7732-18-5 | ACS/ASTM/USP/EP |
| Sodium Chloride | 7647-14-5 | ACS |

| Test | Specification | Result |
|------------|------------------|---|
| Appearance | Colorless liquid | Passed *Not a certified value. |

| Test | Certified Value | Uncertainty | NIST SRM# |
|---|------------------------------|------------------------------|-----------|
| Conductivity at 25°C (Method: SQCP031, SQCP033) | 23.8 $\mu\text{S}/\text{cm}$ | 0.29 $\mu\text{S}/\text{cm}$ | 999 |

Conductivity measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by $k=2$, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|-------------|---------------------|---------------------------------|
| 2236.06-1 | 4 L natural poly | 12 months |
| 2236.06-16 | 500 mL natural poly | 12 months |
| 2236.06-32 | 1 L natural poly | 12 months |

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (02/28/2024)

Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

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