

Certificate of Analysis

Fluoride Standard, 0.5 ppm F⁻ (Premixed with TISAB)

Lot Number: 4403H78**Product Number:** 3161.5**Manufacture Date:** MAR 13, 2024**Expiration Date:** MAR 2025

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Directions for Use: This standard is premixed with TISAB. Do not dilute or add TISAB to this standard. After calibrating with this standard, mix test samples for analysis with an equal volume of Total Ionic Strength Adjustment Buffer, RICCA Cat. No. 8670. Read Fluoride concentration directly (no dilution factor).

| Name | CAS# | Grade |
|--|------------|-----------------|
| Water | 7732-18-5 | ACS/ASTM/USP/EP |
| Acetic Acid | 64-19-7 | ACS |
| Sodium Chloride | 7647-14-5 | ACS |
| Sodium Hydroxide | 1310-73-2 | Reagent |
| 1,2-Cyclohexylenediamine Tetraacetic Acid (CDTA) | 13291-61-7 | ACS |
| Sodium Fluoride | 7681-49-4 | High Purity |

| Test | Specification | Result |
|--------------|------------------|----------|
| Appearance | Colorless liquid | Passed |
| Fluoride (F) | 0.49-0.51 ppm | 0.50 ppm |

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) |
|-------------|---------------------|---------------------------------|
| 3161.5-32 | 1 L natural poly | 12 months |

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

Paul Brandon (03/13/2024)

Production Manager

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

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.