

Certificate of Analysis

Total Ionic Strength Adjustment Buffer (TISAB II), with CDTA for Fluoride Analysis using Ion Selective Electrodes

Lot Number: 4312G67

Product Number: 8670

Manufacture Date: DEC 19, 2023

Expiration Date: DEC 2025

This solution provides a uniform ionic strength background, adjusts pH, and breaks up complexes with interfering polyvalent cations such as Aluminum (Al³⁺) or Ferric (Fe³⁺) Ions for Fluoride Samples and Fluoride Standards in this test method. An equal volume of this buffer solution (usually 25 to 50 milliliters) is added to either the Fluoride Samples or the Fluoride Standards (usually 25 to 50 milliliters) in this test method. RICCA CHEMICAL COMPANY Fluoride Standards, Cat. No. 3170 (10 ppm F), Cat. No. 3171 (100 ppm F), or Cat. No. 3173 (1,000 ppm F), may be used for calibration of the meter and electrode used in this test method.

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

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
pH at 25°C (Method: SQCP027, SQCP033)	5.30-5.50	5.50	185i, 186-I-g, 186-II-g
Suitability for Use	Suitability for use: Fluoride analysis	Passed	

Specification	Reference
Fluoride Buffer	APHA (4500-F- C)
TISAB Solution	EPA (SW-846) (9214)
Buffer Solution, pH 5.0 – 5.5	EPA (340.2)

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)
8670-1	4 L natural poly	24 months
8670-2.5	10 L Cubitainer®	24 months
8670-5	20 L Cubitainer®	24 months

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



Paul Brandon (12/19/2023)

Production Manager

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

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