

Certificate of Analysis

1,10-Phenanthroline, 0.1% (w/v)**Lot Number:** 4402B83**Product Number:** 5520**Manufacture Date:** JAN 31, 2024**Expiration Date:** JAN 2026

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Hydrochloric Acid	7647-01-0	ACS
1,10-Phenanthroline Monohydrate	5144-89-8	ACS

Test	Specification	Result
Appearance	Colorless to very light green liquid	Passed

Specification	Reference
1,10-Phenanthroline, 0.1% solution	TAPPI (T 618 cm-84)
Phenanthroline Solution	APHA (3500-Fe B)
1,10-Phenanthroline Reagent Solution	ACS (N/A)

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)
5520-16	500 mL natural poly	24 months
5520-32	1 L natural poly	24 months

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

Paul Brandon (01/31/2024)

Production Manager

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

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