

Product Specification

1,10-Phenanthroline, 0.3% (w/v)**Lot Number:** SAMPLE**Product Number:** 5522**Manufacture Date:** N/A**Expiration Date:** N/A

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

| Test | Specification | Result |
|------------|--------------------------------------|--------|
| Appearance | Colorless to very light green liquid | N/A |

| Specification | Reference |
|--|---------------------|
| 1,10-Phenanthroline solution (3 g per 1000 mL) | TAPPI (T 613 cm-83) |
| 1,10-Phenanthroline monohydrate, 3 g per 1000 mL | TAPPI (T 602 cm-97) |
| 1,10-Phenanthroline Indicator (3 g/L) | ASTM (E 200) |

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) |
|-------------|---------------------|---------------------------------|
| 5522-32 | 1 L natural poly | 24 months |
| 5522-16 | 500 mL natural poly | 24 months |

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

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