

# Product Specification

## Ferroin Indicator, 0.025 Molar Phenanthroline Ferrous Sulfate Complex

Lot Number: SAMPLE

Product Number: 3140

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
Ferrous Sulfate Heptahydrate	7782-63-0	ACS

Test	Specification	Result
Appearance	Dark red liquid	N/A
Suitability for Use	Very Pale Green (oxidized) - Reddish-Brown (reduced)	N/A

Specification	Reference
Phenanthroline Ferrous Sulfate Indicator Solution	ASTM (D 1252 A)
Phenanthroline Ferrous Sulfate Indicator Solution	ASTM (D 1252 B)
Ferroin Indicator Solution	APHA (5220 B)
Ferroin Indicator Solution (undiluted)	APHA (5220 C)
Phenanthroline-ferrous sulfate (Ferroin) indicator solution	TAPPI (T 235 cm-85)
"Ferroin" indicator	TAPPI (T 610 sp-97)
Phenanthroline-ferrous sulfate	TAPPI (T 203 om-93)
Phenanthroline Ferrous Sulfate (Ferroin) Indicator Solution	EPA (410.3)
Phenanthroline Ferrous Sulfate (Ferroin) Indicator Solution	EPA (410.1)
Phenanthroline Ferrous Sulfate (Ferroin) Indicator Solution	EPA (410.2)
1,10-Phenanthroline Ferrous Sulfate Indicator	ASTM (E 200)
Ferroin Indicator, 0.025 M 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)
3140-4	120 mL amber glass	24 months
3140-32	1 L amber glass	24 months
3140-5	20 L Cubitainer®	12 months
3140-1	4 L amber glass	24 months
3140-16	500 mL amber glass	24 months

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

A handwritten signature in black ink that reads "Katie Schnur". The signature is written in a cursive style with a large, stylized 'K' and 'S'.

Katie Schnur  
Quality Control Manager

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