

# Certificate of Analysis

**Iodine (Iodine-Iodide), 0.100 Normal (N/10)**

**Lot Number:** 1402A04

**Product Number:** 4000

**Manufacture Date:** FEB 07, 2024

**Expiration Date:** JAN 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

To meet USP specifications for Iodine, Tenth-Normal (0.1 N) Volumetric Solution (VS) and Test Solution (TS) add 3-drops of Hydrochloric acid per Liter of R4000.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Iodide	7681-11-0	ACS
Iodine	7553-56-2	ACS

Test	Specification	Result	NIST SRM#
Appearance	Dark brown liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	0.0998-0.1002 N at 20°C	0.1001 N at 20°C	136

Specification	Reference
Standard Iodine, 0.1 N	APHA (4500-Cl B)
Standard iodine Solution, 0.1 N	APHA (4500-Cl C)
Iodine Solution	APHA (3500-Pb B)
Standard Iodine Solution (0.1 N)	EPA (330.2)
Iodine, 0.1 N	TAPPI (T 622 cm-84)
Standard Iodine Solution (0.1 N)	EPA (330.3)
Iodine, 0.1 Normal Volumetric 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)
4000-1	4 L amber glass	12 months
4000-16	500 mL amber glass	12 months
4000-32	1 L amber glass	12 months

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



Heidi J Green (02/07/2024)

Operations Manager

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

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