

## Certificate of Analysis

### Sodium Thiosulfate, 0.100 Normal (N/10)

Lot Number: 1301258

Product Number: 7950

Expiration Date: JUL 2014

Manufacture Date: 1/15/2013

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

This product is specially formulated to increase its stability. A preservative is added to prevent bacterial contamination. However, all Sodium Thiosulfate solutions are subject to slow chemical deterioration and should be restandardized periodically.

#### Contains:

Name	CAS#	Grade
Organic Preservative	Proprietary	Commercial Grade
Sodium Carbonate, Na <sub>2</sub> CO <sub>3</sub>	497-19-8	ACS
Sodium Thiosulfate Pentahydrate, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ·5H <sub>2</sub> O	10102-17-7	ACS
Water, Deionized, H <sub>2</sub> O	7732-18-5	ACS, ASTM D 1193 (Type I), EP, USP

Test Name	Assay Method	Specification	Result
Appearance	Clarity, Color, Odor	Clear, colorless, slight organic odor	Passed Test
Assay at 20 °C (traceable to NIST SRM 136)	Titrimetric vs. Potassium Iodate (Starch Indicator)	0.1000 ± 0.0001 N at 20.0 °C	0.0999 N at 20.0 °C

Specification	Reference	Method Number
Sodium Thiosulfate Solution (0.1 N)	ASTM	D 3869 A
Standard Sodium Thiosulfate, 0.1 N	APHA	4500-Cl B
Sodium thiosulfate, 0.1 N	TAPPI	T 624 cm-85
Sodium thiosulfate, 0.1 N	TAPPI	T 611 cm-97
Standard Sodium Thiosulfate, 0.100 N	APHA	4500-ClO2 E
Standard Sodium Thiosulfate Solution, 0.1 N	APHA	4500-Cl C
Standard sodium thiosulfate titrant, 0.1 N	APHA	2350 E
Sodium thiosulfate, 0.1 N	APHA	2320 B
Sodium thiosulfate, 0.1 M	APHA	2310 B
Sodium thiosulfate, 0.1 N	TAPPI	T 254 cm-85
Sodium thiosulfate, 0.1 N	TAPPI	T 622 cm-84
Sodium Thiosulfate, 0.1 N Volumetric Solution	ASTM	E 200
Sodium thiosulfate, 0.1 N	TAPPI	T 610 sp-97
Sodium Thiosulfate Solution, Standard (0.1 N)	ASTM	D 3703
Sodium Thiosulfate, Standard Solution (0.1 N)	ASTM	D 1832
Sodium Thiosulfate Solution, Standard (0.10 N)	ASTM	D 1291
Sodium Thiosulfate, Standard Solution (0.1 M)	ASTM	D 1159
Sodium Thiosulfate, 0.1 Normal Volumetric Solution	ACS	N/A
0.1 M Sodium thiosulphate Volumetric Solution	EP	3007300
Sodium Thiosulfate, 0.1 mol/L VS	JP	N/A
Sodium Thiosulfate TS	USP	N/A
Sodium Thiosulfate, Tenth-Normal (0.1 N) Volumetric Solution	USP	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.

Shelf Life (unopened container):

Part Number	Shelf Life
7950-2.5	18 months
7950-4	18 months
7950-32CS	18 months
7950-32	18 months
7950-5	18 months
7950-1	18 months
7950-1CT	18 months
7950-1CS	18 months
7950-16	18 months
7950-55	18 months

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



LaNelle Ohlhausen  
Quality Assurance

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

To determine manufacture site using lot number, visit <http://www.riccachemical.com/Documents/lot.pdf>.