

Carbon Black

Carbon Black Reagents for ASTM D1510

Details Matter...

Our sodium thiosulfate solutions are prepared from ACS Grade, micro-crystalline $\text{Na}_2\text{S}_2\text{O}_3$. In order to maximize shelf life, our matrix is prepared using double-deionized, ASTM Type I Water.

Our iodine solutions are prepared from ACS Grade potassium iodide and crystalline elemental iodine. To guarantee a clean and stable product, our matrix is prepared using double-deionized, ASTM Type I Water.

All solutions are prepared gravimetrically using high accuracy analytical balances to ensure precise target concentrations. Each batch is thoroughly homogenized using a high speed industrial mixer to ensure reliable results from the first bottle to the last.

We are titrating our samples on our automated titrator. The automated dosing drive uses 10,000 steps over a 20 mL volume, so its dosing increment *can be* as small as 2 μL . For these applications, we are using a minimum dose of 10 μL for the sodium thiosulfate endpoint and 4 μL for the iodine endpoint. These settings achieve the extremely precise measurements for each titration while also staying within the parameters of the dosing unit.

As stated on our Certificate of Analysis, the sodium thiosulfate is run against a 0.1 N potassium dichromate solution. The exact normality of this solution is calculated by comparing it to NIST potassium dichromate. A set of 6 samples are run that must all be within the nominal value of $0.0394 \text{ N} \pm 0.00008 \text{ N}$.

The certified sodium thiosulfate is then used to titrate iodine. A set of 3 samples are run that must all be within the nominal value of $0.0473 \text{ N} \pm 0.00003 \text{ N}$.

Before releasing either of these reagents for packaging, we run QC checks with a previous lot to ensure accuracy over time.

For additional product information, please visit www.spexcertiprep.com/knowledge-base/carbon-black-reagents.

CERTIFIED REFERENCE MATERIALS

SPEX CertiPrep is the industry leader for over 60 years in the CRM marketplace meeting the needs of laboratories worldwide with innovation and research. Accredited by A2LA to ISO/IEC 17025:2005 & ISO Guide 34:2009. Certified by UL-DQS, ISO 9001:2008.

Carbon Black (cont'd)

Carbon Black Reagents			
Description	Packaging	Volume	Part #
0.0394 N Sodium Thiosulfate	Cubitainer	1 gallon	182002
0.0473 N Iodine	Amber Glass Bottle	1 gallon	183134

FREE SAMPLE!

Contact us today to request a free sample for method validation.

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