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## 0.1 N Sodium Thiosulfate VS

$\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ , 248.19  
 24.82 g in 1000 mL

Dissolve about 26 g of [sodium thiosulfate](#) and 200 mg of [sodium carbonate](#) in 1000 mL of recently boiled and cooled [water](#).

**Standardization:** Accurately weigh about 210 mg of primary standard [potassium dichromate](#), previously pulverized and dried according to the label instructions or, if this information is not available, dried at 120° for 4 h, and dissolve in 100 mL of [water](#) in a glass-stoppered, 500-mL flask. Swirl to dissolve the solid, remove the stopper, and quickly add 3 g of [potassium iodide](#), 2 g of [sodium bicarbonate](#), and 5 mL of [hydrochloric acid](#). Insert the stopper gently in the flask, swirl to mix, and allow to stand in the dark for exactly 10 min. Rinse the stopper and the inner walls of the flask with [water](#), and titrate the liberated iodine with the sodium thiosulfate solution until the solution is yellowish green in color. Add 3 mL of [starch TS](#), and continue the titration until the blue color is discharged. Perform a blank determination.

Restandardize the solution as frequently as supported by laboratory stability data. In the absence of such data, restandardize the solution weekly.

$$N = \frac{\text{mg K}_2\text{Cr}_2\text{O}_7}{49.04 \times \text{mL Na}_2\text{S}_2\text{O}_3}$$

[NOTE—If this volumetric solution is used in a qualitative application such as pH adjustment, dissolution medium, or diluent, its standardization is not required.]

**Auxiliary Information** - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
0.1 N SODIUM THIOSULFATE VS	<a href="#">Margareth R.C. Marques</a> Principal Scientific Liaison	HDQ Headquarters

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