



Sodium thiosulphate, 0.1N

R069

Intended use

Sodium thiosulphate, 0.1N is used as a titrant in iodometry. It is also used in estimating volumetrically the concentrations of certain compounds in solution (hydrogen peroxide, for instance) and in estimating the chlorine content in commercial bleaching powder and water.

Composition**

Ingredients	-
Sodium thiosulphate pentahydrate	24.80 g
Sodium carbonate	200.0 g
Distilled water	1,000.0 ml

**Formula adjusted, standardized to suit performance parameters

Directions

1. For Sodium thiosulphate, 0.1N follow appropriate direction as per application.

Principle And Interpretation

The iodometry is a type of titration that uses a standardized Sodium thiosulphate solution as the titrant, one of the few stable reducing agents where oxidation of air is concerned. Potassium iodate is a strong oxidizing agent, it is treated with excess potassium iodide in acidic media which liberates iodine which is back titrated with Sodium thiosulphate, 0.1N. Uniformity of reactions between iodine and sodium thiosulphate forms the basis for utilizing the standard solution of iodine in the analysis of Sodium thiosulphate.

Type of specimen

Biological sample

Specimen Collection and Handling

Follow appropriate techniques for handling specimens as per established guidelines.

Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/ eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Sodium thiosulphate is unstable in the presence of acids, and iodides in low pH can be oxidized by air oxygen to iodine. Both processes can be a source of titration errors.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

- **Appearance** : Colourless, solution.
- **Clarity** : Clear with no insoluble particles.
- **Identity** : Passes test
- **Normality** : 0.095 - 0.105N

Storage and Shelf Life

On receipt store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Holleman, A. F.; Wiberg, E. "Inorganic Chemistry" Academic Press: San Diego, 2001. ISBN 0-12-352651-5.
2. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
3. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.



Storage temperature



Do not use if package is damaged



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