

The EINECS number for sodium sulfite is 231-821-4. The PubChem Compound ID (CID) for sodium sulfite is 24437.

19 Specific References

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20 General References

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21 Authors

S Sienkiewicz, S Driver.

22 Date of Revision

4 May 2017.

Sodium Thiosulfate

1 Nonproprietary Names

BP: Sodium Thiosulphate

JP: Sodium Thiosulfate Hydrate

PhEur: Sodium Thiosulfate

USP–NF: Sodium Thiosulfate

2 Synonyms

Ametox; disodium thiosulfate; disodium thiosulfate pentahydrate; natrii thiosulfas; natrium thiosulfuricum; sodium hyposulfite; sodium subsulfite; *Sodothiol*; *Sulfothiorine*; thiosulfuric acid disodium salt.

3 Chemical Name and CAS Registry Number

Sodium thiosulfate anhydrous [7772-98-7]

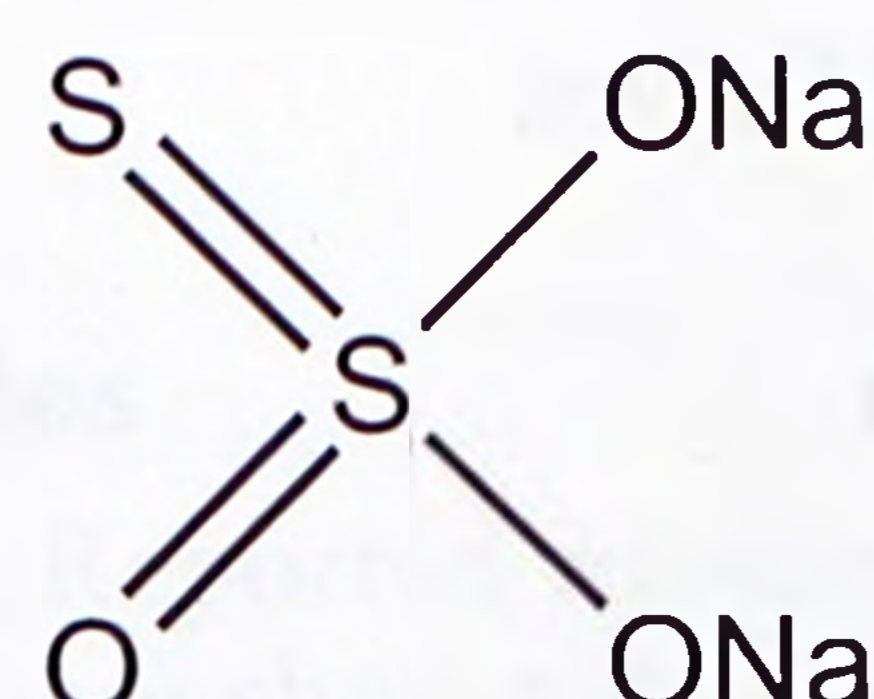
Sodium thiosulfate pentahydrate [10102-17-7]

4 Empirical Formula and Molecular Weight

$\text{Na}_2\text{S}_2\text{O}_3$ 158.11 (for anhydrous)

$\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ 248.2 (for pentahydrate)

5 Structural Formula



6 Functional Category

Antioxidant.

7 Applications in Pharmaceutical Formulation or Technology

Sodium thiosulfate is used as an antioxidant in pharmaceuticals (ophthalmic, intravenous, and oral preparations).

8 Description

Sodium thiosulfate occurs as odorless and colorless crystals, a crystalline powder or granules. It is efflorescent in dry air and deliquescent in moist air.

9 Pharmacopeial Specifications

See Table I.

10 Typical Properties

Acidity/alkalinity Aqueous solution practically neutral at pH 6.5–8.0 (pentahydrate).

Density 1.69 g/cm³ (pentahydrate)

Hygroscopicity Slightly deliquesces in moist air (pentahydrate).

Melting point 48°C (pentahydrate)

Solubility Soluble in water; practically insoluble in ethanol (95%).

11 Stability and Storage Conditions

Sodium thiosulfate decomposes on heating. The bulk powder should be stored in a cool place, and the container should be kept