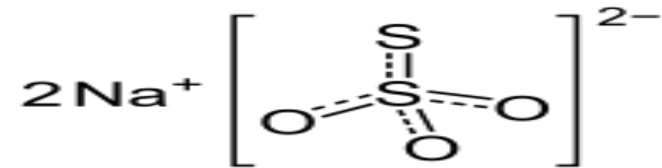


Sodium Thiosulfate

Sodium thiosulfate is an imperative inorganic salt with a few medicinal employments. It is likewise called sodium hyposulfite or 'hypo'.



*Molecular formula-Na₂S₂O₃
amolar mass is 158.11 g/mol.*

Preparation-*Sodium thiosulfate can be set up by warming sulfur with either fluid sodium sulfite arrangement or watery sodium hydroxide arrangement.*



Physical properties : *Sodium thiosulfate is a white crystalline strong which is unscented and exceptionally water dissolvable. It has a thickness of 1.667 g/mL and a dissolving purpose of 48.3°C.*

Chemical properties: *Sodium thiosulfate is a nonpartisan salt which promptly separates in water to give sodium and thiosulfate particles. Na₂S₂O₃ is a steady strong under ordinary conditions, however decays after warming to give sodium sulfate and sodium polysulfide:*



It likewise breaks down when treated with acids to give sulfur and sulfur dioxide
$$\text{Na}_2\text{S}_2\text{O}_3 + 2 \text{ HCl} \rightarrow 2 \text{ NaCl} + \text{S} + \text{SO}_2 + \text{H}_2\text{O}$$

uses

- *It is an imperative cure utilized for treating cyanide harming.*
- *Finds use in water treatment, killing dye, calfskin tanning, gold extraction, photographic preparing, and compound warming cushions.*
- *It responds stoichiometrically (in equimolar sums) with fluid arrangements of iodine, thus it is broadly utilized as a part of research centers for iodine based titrations.*