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ProductInformation

Sodium thiocyanate

Product Number **S 7757**
Store at Room Temperature

Replacement for Product Number 207993

Product Description

Molecular Formula: NaSCN
Molecular Weight: 81.07
CAS Number: 540-72-7
Synonyms: sodium sulfocyanate, sodium rhodanide, thiocyanate sodium[1]

Sodium thiocyanate is a chaotropic agent that is utilized in such large scale applications as a spinning solvent for polyacrylonitrile production, a hardening accelerator for cement and concrete mixes, and in the production of ink for ink-jet printers. It is also used as a photographic stabilizer, a corrosion inhibitor, a polymer stabilizer, and an intermediate in the production of herbicides and insecticides. NaSCN may also be utilized in the production of other thiocyanates.[1]

NaSCN lowers the melting temperature of proteins and enhances their solubility, and has been used in both the crystallization and purification of proteins.[2,3,4,5,6] NaSCN has also been utilized in the preparation of novel agents for the synthesis of peptidylthiohydantoins.[7] A study of the effects of thiocyanate on chymotrypsinogen secondary structure and aggregation during freezing, drying, and rehydration has been reported.[8]

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (133 mg/ml), yielding a clear, colorless solution. It is also soluble in alcohol and acetone.[1]

Storage/Stability

Aqueous solutions of NaSCN are neutral. The aqueous dissolution of NaSCN is an endothermic process.[1]

References

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7. Shenoy, N. R., et al., Studies in C-terminal sequencing: new reagents for the synthesis of peptidylthiohydantoins. J. Protein Chem., **12(2)**, 195-205 (1993).

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