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## Product Information

### Sodium sulfate ACS Reagent

Product Number 239313  
Store at Room Temperature  
**Exact replacement for Product Number S 6264**

#### Product Description

Molecular Formula:  $\text{Na}_2\text{SO}_4$   
Molecular Weight: 142.0  
CAS Number: 7757-82-6

This product is designated as ACS Reagent grade, and meets the specifications of the American Chemical Society (ACS) for reagent chemicals.

Sodium sulfate is a reagent used in large-scale applications such as dyeing and printing textiles, and the manufacture of glass and paper pulp. It occurs in nature as the minerals miabilite and thenardite.<sup>1</sup> Anhydrous sodium sulfate is frequently used in the drying of organic liquids.<sup>1,2</sup>

Sodium sulfate has been used in protein crystallization.<sup>3,4</sup> The effect of salts, including sodium sulfate, on the adsorption processes of proteins in hydrophobic interaction chromatography has been reported.<sup>5</sup> Sodium sulfate has been used to investigate prion protein folding.<sup>6</sup> A protocol for the analysis of antibody-antigen interactions by size-exclusion HPLC that incorporates sodium sulfate has been reported.<sup>7</sup>

#### Precautions and Disclaimer

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

#### Storage/Stability

This product is soluble in water (100 mg/ml), yielding a clear, colorless solution.

It is advised to store this product tightly closed and in a dry place.<sup>1</sup>

#### References

1. The Merck Index, 12th ed., Entry# 8829.
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3. Recacha, R., et al., *Toxoplasma gondii* adenosine kinase: expression, purification, characterization, crystallization and preliminary crystallographic analysis. *Acta Crystallogr. D Biol. Crystallogr.*, **56 (Pt 1)**, 76-78 (2000).
4. Weiss, M. S., et al., Metal binding to porcine pancreatic elastase: calcium or not calcium. *Acta Crystallogr. D Biol. Crystallogr.*, **58(Pt 9)**, 1407-1412 (2002).
5. Lin, F. Y., et al., Microcalorimetric studies on the interaction mechanism between proteins and hydrophobic solid surfaces in hydrophobic interaction chromatography: effects of salts, hydrophobicity of the sorbent, and structure of the protein. *Anal. Chem.*, **73(16)**, 3875-3883 (2001).
6. Nandi, P. K., et al., Unusual property of prion protein unfolding in neutral salt solution. *Biochemistry*, **41(36)**, 11017-11024 (2002).
7. Sanny, C. G., and Price, J. A., Analysis of antibody-antigen interactions using size-exclusion high-performance (pressure) liquid chromatography. *Anal. Biochem.*, **246(1)**, 7-14 (1997).

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