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ProductInformation

Sodium sulfate
Plant Cell Cultured Tested
Product Number S 5640
Store at Room Temperature

Product Description

Molecular Formula: Na₂SO₄ Molecular Weight: 142.0 CAS Number: 7757-82-6

This product is plant cell culture tested (0.2 mg/ml) and is appropriate for use in plant cell culture experiments.

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. Anhydrous sodium sulfate is frequently used in the drying of organic liquids. 1,2

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

Precautions and Disclaimer

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

Preparation Instructions

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

Storage/Stability

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

References

- 1. The Merck Index, 12th ed., Entry# 8829.
- 2. The Systematic Identification of Organic Compounds, 6th ed., Shriner, R. L., et al., John Wiley & Sons (New York: 1980), p. 518.
- 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).
- 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).
- 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).
- Nandi, P. K., et al., Unusual property of prion protein unfolding in neutral salt solution. Biochemistry, 41(36), 11017-11024 (2002).
- 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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