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ProductInformation

Potassium sulfate
Plant Cell Culture Tested

Product Number **P 8541**
Store at Room Temperature

Product Description

Molecular Formula: K_2SO_4
Molecular Weight: 174.3
CAS Number: 7778-80-5
Melting Point: 1,067 °C[1]

This product is plant cell culture tested (1 mg/ml) and is suitable for plant cell culture applications.

Potassium sulfate is a reagent that is used in various industrial and research applications. Industrial uses include fertilizer production, the manufacture of potassium alum, potassium carbonate, and glass.[1] Analytical applications include the Kjeldahl method for the determination of nitrogen and protein in foodstuffs.[2]

The effect of potassium sulfate on the folding and unfolding of tropomyosin has been investigated.[3] Potassium sulfate has been used in studies on electrostatic effects on pK_avalues of amino acid residues in staphylococcal nuclease.[4] The use of potassium sulfate for improved protein separation by capillary zone electrophoresis in buffers containing high concentrations of zwitterionic salts has been described.[5] A protocol that incorporates potassium sulfate for the adsorption of immune complexes on agarose derivative adsorbents has been published.[6]

Precautions and Disclaimer

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

Preparation Instructions

This product is soluble in water (66 mg/ml), yielding a clear, colorless solution.

References

1. The Merck Index, 12th ed., Entry# 7845.
2. Thompson, M., et al., A comparison of the Kjeldahl and Dumas methods for the determination of protein in foods, using data from a proficiency testing scheme. Analyst, **127(12)**, 1666-1668 (2002).
3. Lehrer, S. S., and Yuan, A., The stability of tropomyosin at acid pH: effects of anion binding. J. Struct. Biol., **122(1-2)**, 176-179 (1998).
4. Lee, K. K., et al., Electrostatic effects in highly charged proteins: salt sensitivity of pK_A values of histidines in staphylococcal nuclease. Biochemistry, **41(17)**, 5656-5667 (2002).
5. Bushey, M. M., and Jorgenson, J. W., Capillary electrophoresis of proteins in buffers containing high concentrations of zwitterionic salts. J. Chromatogr., **480**, 301-310 (1989).
6. Oscarsson, S., et al., Thiophilic adsorbents for RIA and ELISA procedures. J. Immunol. Methods, **143(2)**, 143-149 (1991).

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