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ProductInformation

Sodium acetate trihydrate

Product Number **S 9513**
Storage at Room Temperature
23,650-0 is an exact replacement for S 9513

Product Description

Molecular Formula: $C_2H_3O_2Na \bullet 3H_2O$
Molecular Weight: 136.1
CAS Number: 6131-90-4
Synonym: Acetic acid, sodium salt

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

Sodium acetate is a widely used reagent in molecular biology applications. In addition to being used as a buffer, it is used in the purification and precipitation of nucleic acids,[1,2,3] protein crystallization,[4] staining of gels in protein gel electrophoresis[5], and HPLC.[6]

Sodium acetate may be used as a substrate for acetokinase (acetate kinase).[7]

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. The pH of a 0.1 M aqueous sodium acetate solution at 25 °C is 8.9.[8]

References

1. Evans, J.K., et al., Simultaneous purification of RNA and DNA from liver using sodium acetate precipitation. Biotechniques, **24**, 416-418 (1998).
2. Molecular Cloning: A Laboratory Manual, 3rd ed., Sambrook, J. F., et al., Cold Spring Harbor Laboratory Press (Cold Spring Harbor, NY: 2001), pp. 6.26-6.27, A8.12-A8.16.
3. Wallace, D.M., Large- and small-scale phenol extractions. Methods Enzymol., **152**, 33-41 (1987).
4. Baniecki, M.L., et al., Adenovirus proteinase: crystallization and preliminary X-ray diffraction studies to atomic resolution. Acta Crystallogr. D Biol. Crystallogr., **58**, 1462-1464 (2002).
5. Bjellqvist, B., et al., A nonlinear wide-range immobilized pH gradient for two-dimensional electrophoresis and its definition in a relevant pH scale. Electrophoresis, **14**, 1357-1365 (1993).
6. Clark, T.N., et al., Determination of 3'-azido-2',3'-dideoxyuridine in maternal plasma, amniotic fluid, fetal and placental tissues by high-performance liquid chromatography. J. Chromatogr. B Biomed. Sci. Appl., **755**, 165-172 (2001).
7. Rose, I., Acetate Kinase of Bacteria (Acetokinase). Meth. Enzymol., **1**, 591-595 (1955).
8. The Merck Index, 12th ed., Entry# 8711.

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