PRODUCT INFORMATION

Retinyl Acetate
Item No. 20242

CAS Registry No.: 127-47-9
Formal Name: retinol acetate
Synonyms: NSC 122045, NSC 122760, Ro 1-5275, Vitamin A Acetate
MF: C_{22}H_{32}O_{2}
FW: 328.5
Purity: ≥98%
UV/Vis.: λ_{max}: 244, 326 nm
Supplied as: A semi-solid
Storage: -20°C
Stability: ≥2 years

Special Conditions: Low melting

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Retinyl acetate is supplied as a crystalline solid. A stock solution may be made by dissolving the retinyl acetate in the solvent of choice. Retinyl acetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of retinyl acetate in ethanol is approximately 16 mg/ml and approximately 5 mg/ml in DMSO and DMF.

Retinyl acetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, retinyl acetate should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Retinyl acetate has a solubility of approximately 0.3 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Retinyl acetate is a natural form of vitamin A. It is the acetate ester of retinol. As ester forms of retinol are thermally more stable than retinol, they are commonly used in cosmetic products. Retinyl acetate, like other retinoids, can reduce cell proliferation and promote differentiation and, as a result, has potential chemotherapeutic value. This product is intended for research applications.

References