

PRODUCT INFORMATION



2-hydroxy Decanoic Acid

Item No. 22678

CAS Registry No.: 5393-81-7

Synonyms: α -hydroxy Capric Acid,
(\pm)-2-hydroxy Decanoic Acid,
(\pm)- α -hydroxy Decanoic Acid,
 α -hydroxy Decylic Acid,
2-hydroxy Decylic Acid,
2-Hydroxycapric acid, FA 10:0;O,
NSC 4801

MF: $C_{10}H_{20}O_3$

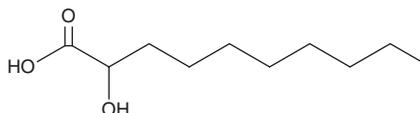
FW: 188.3

Purity: $\geq 95\%$

Supplied as: A crystalline solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

2-hydroxy Decanoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-hydroxy decanoic acid in the solvent of choice. 2-hydroxy Decanoic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2-hydroxy decanoic acid in these solvents is approximately 2.5 mg/ml in ethanol and 20 mg/ml in DMSO and DMF.

2-hydroxy Decanoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-hydroxy decanoic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 2-hydroxy Decanoic acid has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2-hydroxy Decanoic acid is a fatty acid found in the lipophilic portion of the lipopolysaccharide fraction of *P. ovalis*, an aerobic bacterium.¹ Synthesis of the hydroxy portion of 2-hydroxy decanoic acid occurs through oxygenation by monooxygenase, using molecular O_2 as its substrate.

Reference

1. Kawahara, K., Uchida, K., and Aida, K. Direct hydroxylation in the biosynthesis of hydroxy fatty acid in lipid a of *Pseudomonas ovalis*. *Biochim. Biophys. Acta.* **572(1)**, 1-8 (1979).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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