

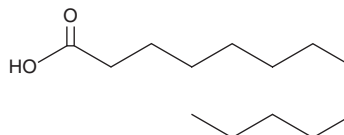
PRODUCT INFORMATION



Tridecanoic Acid

Item No. 19725

CAS Registry No.: 638-53-9
Formal Name: tridecanoic acid
Synonyms: NSC 25955, NSC 69131, n-Tridecanoic, n-Tridecoic Acid Acid, Tridecyclic Acid
MF: C₁₃H₂₆O₂
FW: 214.3
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Tridecanoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the tridecanoic acid in the solvent of choice, which should be purged with an inert gas. Tridecanoic 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 tridecanoic acid in DMSO is approximately 10 mg/ml and approximately 25 mg/ml in ethanol and DMF.

Tridecanoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tridecanoic acid should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Tridecanoic acid has a solubility of approximately 0.25 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tridecanoic acid is a 13-carbon saturated fatty acid found in dairy products and also as a product of anaerobic biodegradation of n-hexadecane.^{1,2} It has been identified as a substrate of phospholipase A₂.³

References

1. Oliveira, R., Faria, M., Silva, R., *et al.* Fatty acid profile of milk and cheese from dairy cows supplemented a diet with palm kernel cake. *Molecules* **20(8)**, 15434-15448 (2015).
2. Callaghan, A.V., Tierney, M., Phelps, C.D., *et al.* Anaerobic biodegradation of n-hexadecane by a nitrate-reducing consortium. *Appl. Environ. Microbiol.* **75(5)**, 1339-1344 (2009).
3. Singh, G., Jasti, J., Saravanan, K., *et al.* Crystal structure of the complex formed between a group I phospholipase A₂ and a naturally occurring fatty acid at 2.7 Å resolution. *Protein Sci.* **14(2)**, 395-400 (2005).

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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