

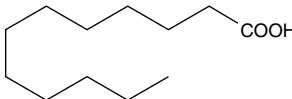
Product Information



Lauric Acid

Item No. 10006626

CAS Registry No.: 143-07-7
Formal Name: Dodecanoic acid
Synonyms: Dodecanoic acid, NSC 5026
MF: C₁₂H₂₄O₂
FW: 200.3
Purity: ≥98%
Stability: ≥2 years at room temperature
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that lauric acid be stored as supplied at room temperature. It should be stable for at least two years.

Lauric acid is supplied as a crystalline solid. A stock solution may be made by dissolving the lauric acid in an organic solvent purged with an inert gas. Lauric acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of lauric acid in these solvents is approximately 20 mg/ml.

Lauric acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lauric acid should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Lauric acid has a solubility of approximately 0.5 mg/ml in a 1:8 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Saturated fatty acids are synthesized by both plants and animals from acetyl coenzyme A as a form of long-term energy storage. Lauric acid is a common 12-carbon saturated fat plentiful in coconut and other nut oils. Saturated free fatty acids induce the expression of cyclooxygenase-2, an effect that is significant at 25 μM in RAW 264.7 cells, with lauric acid being the most potent of the C:8-18 fatty acids.¹

Reference

1. Lee, J.Y., Sohn, K.H., Rhee, S.H., *et al.* Saturated fatty acids, but not unsaturated fatty acids, induced the expression of cyclooxygenase-2 mediated through toll-like receptor 4. *J. Biol. Chem.* **276(20)**, 16683-16689 (2001).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006626

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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