# PRODUCT INFORMATION



## Lauric Acid

Item No. 10006626

CAS Registry No.: 143-07-7 Formal Name: dodecanoic acid Synonyms: C12:0, NSC 5026

MF:  $C_{12}H_{24}O_{2}$ FW: 200.3 **Purity:** ≥98%

Supplied as: A crystalline solid Storage: Room temperature

Stability: ≥4 years

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

# **Laboratory Procedures**

Lauric acid is supplied as a crystalline solid. A stock solution may be made by dissolving the lauric acid in the solvent of choice, which should be purged with an inert gas. Lauric acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of lauric acid in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

## Description

Lauric acid is a medium-chain saturated fatty acid. It has been found at high levels in coconut oil. Lauric acid induces the activation of NF-κB and the expression of COX-2, inducible nitric oxide synthase (iNOS), and IL-1 $\alpha$  in RAW 264.7 cells when used at a concentration of 25  $\mu$ M.<sup>2</sup>

### References

- 1. Laureles, L.R., Rodriguez, F.M., Reaño, C.E., et al. Variability in fatty acid and triacylglycerol composition of the oil of coconut (Cocos nucifera L.) hybrids and their parentals. J. Agric. Food Chem. 50(6), 1581-1586
- 2. 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).

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

SAFEI Y DAIA
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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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**CAYMAN CHEMICAL** 

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA **PHONE:** [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM