

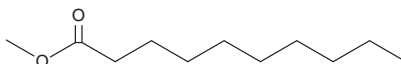
PRODUCT INFORMATION



Decanoic Acid methyl ester

Item No. 26864

CAS Registry No.: 110-42-9
Synonyms: C10:0 methyl ester, Capric Acid methyl ester, Methyl Caproate, Methyl Decanoate, NSC 3713, SFE 11:0
MF: C₁₁H₂₂O₂
FW: 186.3
Purity: ≥98%
Supplied as: A neat oil
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Decanoic acid methyl ester is supplied as a neat oil. A stock solution may be made by dissolving the decanoic acid methyl ester in the solvent of choice, which should be purged with an inert gas. Decanoic acid methyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of decanoic acid methyl ester in ethanol and DMF is approximately 25 mg/ml and approximately 10 mg/ml in DMSO.

Decanoic acid methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, decanoic acid methyl ester should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Decanoic acid methyl ester 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

Decanoic acid methyl ester is an ester form of decanoic acid (Item No. 20838). It has been studied as a single component biodiesel surrogate.¹

Reference

1. Wang, W. and Oehlschlaeger, M.A. A shock tube study of methyl decanoate autoignition at elevated pressures. *Combust. Flame* **159**(2), 476-481 (2013).

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.

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.

Copyright Cayman Chemical Company, 02/14/2024

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