

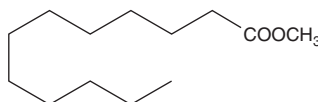
PRODUCT INFORMATION



Lauric Acid methyl ester

Item No. 20608

CAS Registry No.: 111-82-0
Formal Name: dodecanoic acid, methyl ester
Synonyms: Methyl dodecanoate, Methyl laurate, NSC 5027
MF: C₁₃H₂₆O₂
FW: 214.3
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

Lauric acid methyl ester is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of lauric acid methyl ester in these solvents is approximately 20 and 30 mg/ml, respectively.

Description

Lauric acid methyl ester is an esterified version of lauric acid (Item No. 10006626), which is a common 12-carbon saturated fatty acid. Lauric acid methyl ester was a major component (35.5%) of biodiesel made from crude fat extracted from black soldier flies, with oleic acid methyl ester (23.6%) and palmitic acid methyl ester (14.8%; Item No. 10007358) as lesser components.¹ It has also been used in the transesterification of starches and as an internal standard for GC- and LC-MS.^{2,3}

References

1. Li, Q., Zheng, L., Cai, H., *et al.* From organic waste to biodiesel: Black soldier fly, *Hermetia illucens*, makes it feasible. *Fuel* **90(4)**, 1545-1548 (2011).
2. Aburto, J., Alric, I., and Borredon, E. Organic solvent-free transesterification of various starches with lauric acid methyl ester and triacyl glycerides. *Starch* **57**, 145-152 (2005).
3. Wang, Y., Ou, S., Liu, P., *et al.* Comparison of two different processes to synthesize biodiesel by waste cooking oil. *J. Mol. Catal. A Chem.* **252(1-2)**, 107-112 (2006).

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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