# PRODUCT INFORMATION



# Arachidic Acid methyl ester

Item No. 26724

CAS Registry No.: 1120-28-1

Formal Name: eicosanoic acid, methyl ester

Synonyms: C20:0 methyl ester,

Eicosanoic Acid methyl ester,

Methyl Arachidate,

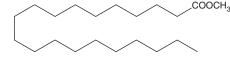
Methyl Eicosanoate, SFE 21:0

MF:  $C_{21}H_{42}O_{2}$ FW: 326.6 **Purity:** ≥98%

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



## **Laboratory Procedures**

Arachidic acid methyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the arachidic acid methyl ester in the solvent of choice. Arachidic acid methyl ester is soluble in organic solvents such as ethanol and dimethyl formamide, which should be purged with an inert gas. The solubility of arachidic acid methyl ester in these solvents is approximately 0.1 and 2 mg/ml, respectively.

Arachidic acid methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, arachidic acid methyl ester should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Arachidic acid methyl ester has a solubility of approximately 0.5 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

Arachidic acid methyl ester is an esterified form of arachidic acid (Item Nos. 9000339 | 21906). It is a minor constituent of biodiesel generated from acid-catalyzed or subcritical water-subcritical methanol (SCW-SCM) in situ transesterification of dry activated sludge or sludge oil, respectively.<sup>1</sup>

#### Reference

1. Huynh, L.H., Tran Nguyen, P.L., Ho, Q.P., et al. Catalyst-free fatty acid methyl ester production from wet activated sludge under subcritical water and methanol condition. Bioresour. Technol. 123, 112-116 (2012).

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

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

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