

# PRODUCT INFORMATION



## Octacosanoic Acid methyl ester

Item No. 26726

CAS Registry No.: 55682-92-3  
Formal Name: octacosanoic acid, methyl ester  
Synonyms: C28:0 methyl ester,

Methyl Montanate,  
Methyl Octacosanoate,  
Montanic Acid methyl ester,  
SFE 29:0

MF:  $C_{29}H_{58}O_2$

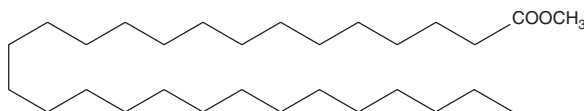
FW: 438.8

Purity:  $\geq 95\%$

Supplied as: A crystalline solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

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

Octacosanoic acid methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, octacosanoic acid methyl ester should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Octacosanoic acid methyl ester has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Octacosanoic acid methyl ester is a very long-chain fatty acid methyl ester that has been found in transesterified palm oil.<sup>1</sup> It has also been found in biodiesel produced by the microalga *Botryococcus* and in sediment samples from Lake Kivu in the East African rift valley.<sup>2,3</sup>

### References

1. Puah, C.W., Choo, Y.M., Ma, A.N., *et al.* Very long chain fatty acid methyl esters in transesterified palm oil. *Lipids* **41**(3), 305-308 (2006).
2. Ashokkumar, V., Agila, E., Pandian, S., *et al.* Optimization and characterization of biodiesel production from microalgae *Botryococcus* grown at semi-continuous system. *Energy Convers. Manag.* **88**, 936-946 (2014).
3. Al-Mutlaq, K., Standley, L.J., and Simoneit, B.R. Composition and sources of extractable organic matter from a sediment core in Lake Kivu, East African rift valley. *Appl. Geochem.* **23**(5), 1023-1040 (2008).

#### 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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#### 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