# PRODUCT INFORMATION



# Heptadecanoic Acid methyl ester

Item No. 26723

CAS Registry No.: 1731-92-6

C17:0 methyl ester, Synonyms:

Margaric Acid methyl ester, Methyl Heptadecanoate,

Methyl Margarate, NSC 97364, SFE 18:0

MF:  $C_{18}H_{36}O_{2}$ FW: 284.5 **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 218 nm 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**

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

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

Heptadecanoic acid methyl ester is an esterified form of heptadecanoic acid (Item No. 19722). It has been found in biodiesel produced by C. sorokiniana microalgae as well as in several types of animal fat biodiesel. $^{1,2}$ Heptadecanoic acid methyl ester has been used as an internal standard for the quantification of fatty acid methyl esters in human plasma.3

### References

- 1. Dong, T., Wang, J., Miao, C., et al. Two-step in situ biodiesel production from microalgae with high free fatty acid content. Bioresour. Technol. 136, 8-15 (2013).
- 2. Sander, A., Košćak, M.A., Kosir, D., et al. The influence of animal fat type and purification conditions on biodiesel quality. Renewable Energy 118, 752-760 (2018).
- 3. Aleryani, S.L., Cluette-Brown, J.E., Khan, Z.A., et al. Fatty acid methyl esters are detectable in the plasma and their presence correlates with liver dysfunction. Clin. Chim. Acta 359(1-2), 141-149 (2005).

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.

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