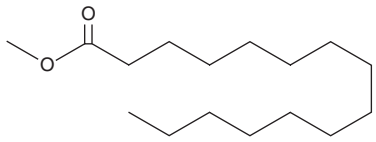
PRODUCT INFORMATION

Pentadecanoic Acid methyl ester

Item No. 26722

CAS Registry No.: 7132-64-1
Synonyms: C15:0 methyl ester, Methyl Pentadecanoate, Pentadecylic Acid methyl ester, SFE 16:0
MF: $C_{16}H_{32}O_2$
FW: 256.4
Purity: ≥95%
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

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

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

Pentadecanoic acid methyl ester is an esterified form of pentadecanoic acid (Item No. 17399). It has been found as a minor component in biodiesels made from the transesterification of beef tallow, soybean oil, and babassu oil blends.[1] It has also been found in latent fingerprint residue samples.[2]

References

1. Teixeira, G.A.A., Maia, A.S., and Santos, I.M.G. Biodiesels from beef tallow/soybean oil/babassu oil blends. Correlation between fluid dynamic properties and TMDSC data. *J. Therm. Anal. Calorim.* **106(2)**, 563-567 (2011).
2. Michalski, S., Shaler, R., and Dorman, F.L. The evaluation of fatty acid ratios in latent fingermarks by gas chromatography/mass spectrometry (GC/MS) analysis. *J. Forensic Sci.* **58(Suppl 1)**, S215-S220 (2013).

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