

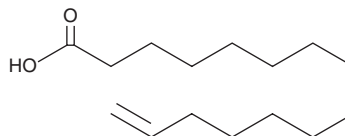
PRODUCT INFORMATION



14-Pentadecenoic Acid

Item No. 19724

CAS Registry No.: 17351-34-7
Synonyms: FA 15:1, ω -Pentadecenoic Acid
MF: $C_{15}H_{28}O_2$
FW: 240.4
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

14-Pentadecenoic acid is supplied as a solid. A stock solution may be made by dissolving the 14-pentadecenoic acid in the solvent of choice, which should be purged with an inert gas. 14-Pentadecenoic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 14-pentadecenoic acid in ethanol and DMF is approximately 25 mg/ml and approximately 10 mg/ml in DMSO.

14-Pentadecenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 14-pentadecenoic acid should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 14-Pentadecenoic acid has a solubility of approximately 0.25 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

14-Pentadecenoic acid is a 15-carbon, long-chain fatty acid that contains an alkene functional group on the terminal carbon of its aliphatic tail. The oxidation pattern of this fatty acid resulting from growth of *M. cerificans* at the expense of the parent alkene has been reported.¹ 14-Pentadecenoic acid has been used in the fabrication of fibrous scaffold biomaterials for tissue engineering applications and for the construction of metallomesogenic side-chain polymers that coat capillary columns used in gas chromatography.^{2,3}

References

1. Makula, R. and Finnerty, W.R. Microbial assimilation of hydrocarbons. II. Fatty acids derived from 1-alkenes. *J. Bacteriol.* **95(6)**, 2108-2111 (1968).
2. Focarete, M.L., Gualandi, C., Scandola, M., *et al.* Electrospun scaffolds of a polyhydroxyalkanoate consisting of ω -hydroxypentadecanoate repeat units: Fabrication and *in vitro* biocompatibility studies. *J. Biomater. Sci. Polym. Ed* **21(10)**, 1283-1296 (2010).
3. Liu, C.Y., Chen, J.-L., Shiue, C.-C., *et al.* Synthesis and analytical properties of a novel columnar metallomesogenic polymer. *J. Chromatogr. A* **862(1)**, 65-83 (1999).

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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