

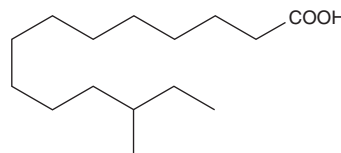
PRODUCT INFORMATION



12-methyl Myristic Acid

Item No. 24817

CAS Registry No.: 5502-94-3
Formal Name: 12-methyl-tetradecanoic acid
Synonyms: FA 15:0, (±)-12-methyl Tetradecanoic Acid
MF: C₁₅H₃₀O₂
FW: 242.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

12-methyl Myristic acid is supplied as a solid. A stock solution may be made by dissolving the 12-methyl myristic acid in the solvent of choice. 12-methyl Myristic acid is soluble in organic solvents such as chloroform, ethanol, and ethyl ether, which should be purged with an inert gas.

Description

12-methyl Myristic acid is a methylated fatty acid that has been found in bacteria, dairy products, wild-caught and farm-raised saltwater fish, and mouse subcutaneous adipose tissue.¹⁻⁴ *In vitro*, 12-methyl myristic acid (0.625-40 µg/ml) has antifouling activity, reducing larval settlement of *H. elegans* in a concentration-dependent manner.⁵ Levels of 12-methyl myristic acid are decreased in mice fed a high-fat diet compared to mice fed a standard diet.³

References

1. Santos, I.C., Smuts, J., Choi, W.-S., *et al.* Analysis of bacterial FAMES using gas chromatography - vacuum ultraviolet spectroscopy for the identification and discrimination of bacteria. *Talanta* **182**, 536-543 (2018).
2. Giaccone, D., Revello-Chion, A., Galassi, L., *et al.* Effect of milk thermisation and farming system on cheese sensory profile and fatty acid composition. *Int. Dairy J.* **59**, 10-19 (2016).
3. Moon, S.-K., Choi, B.-D., and Jeong, B.-Y. Comparison of lipid classes and fatty acid compositions among eight species of wild and cultured seawater fishes. *J. Fish. Sci. Tech.* **3(2)**, 118-125 (2000).
4. Rodríguez-Alcalá, L.M.M., Sá, C., Pimentel, L.L., *et al.* Endocrine disruptor DDE associated with a high-fat diet enhances the impairment of liver fatty acid composition in rats. *J. Agric. Food Chem.* **63(42)**, 9341-9348 (2015).
5. Xu, Y., Li, H., Xiao, X., *et al.* Inhibitory effects of a branched-chain fatty acid on larval settlement of the polychaete *Hydroides elegans*. *Mar. Biotechnol. (NY)* **11(4)**, 495-504 (2009).

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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