

PRODUCT INFORMATION



1,3-Dimyristoyl-2-Eicosapentaenoyl Glycerol

Item No. 26986

CAS Registry No.: 191786-55-7

Formal Name: 5Z,8Z,11Z,14Z,17Z-eicosapentaenoic acid, 2-[(1-oxotetradecyl)oxy]-1-[[[(1-oxotetradecyl)oxy]methyl]ethyl ester

Synonyms: MEM, 1,3-Myristin-2-Eicosapentaenoin, 14:0/20:5/14:0-TG, TG(14:0/20:5/14:0)

MF: $C_{51}H_{88}O_6$

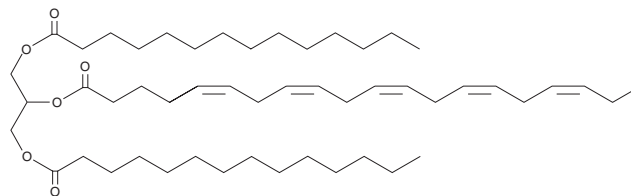
FW: 797.2

Purity: $\geq 98\%$

Supplied as: A 10 mg/ml solution in methyl acetate

Storage: -20°C

Stability: ≥ 4 years



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

Laboratory Procedures

1,3-Dimyristoyl-2-eicosapentaenoyl glycerol (MEM) is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol and dimethyl formamide purged with an inert gas can be used. The solubility of MEM in these solvents is approximately 10 mg/ml. MEM is also slightly soluble in chloroform.

MEM is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of MEM should be diluted with the aqueous buffer of choice. MEM has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

MEM is a triacylglycerol that contains myristic acid (Item No. 13351) at the *sn*-1 and *sn*-3 positions and eicosapentaenoic acid (Item Nos. 90110 | 90110.1 | 21908) at the *sn*-2 position. The myristoyl groups in MEM do not affect the oxidative stability of eicosapentaenoic acid (EPA) during long-term storage at 25°C .¹

Reference

1. Endo, Y., Hoshizaki, S., and Fujimoto, K. Autoxidation of synthetic isomers of triacylglycerol containing eicosapentaenoic acid. *J. Am. Oil Chem. Soc.* **74**(5), 543-548 (1997).

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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