

PRODUCT INFORMATION



1-Myristoyl-2-Linoleoyl-3-Oleoyl-*rac*-glycerol

Item No. 28561

CAS Registry No.: 108961-58-6
Formal Name: 9Z,12Z-octadecadienoic acid, 1-[[[(9Z)-1-oxo-9-octadecen-1-yl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester

Synonyms: 1-Myristin-2-Linolein-3-Olein, TG(14:0/18:2/18:1)

MF: C₅₃H₉₆O₆

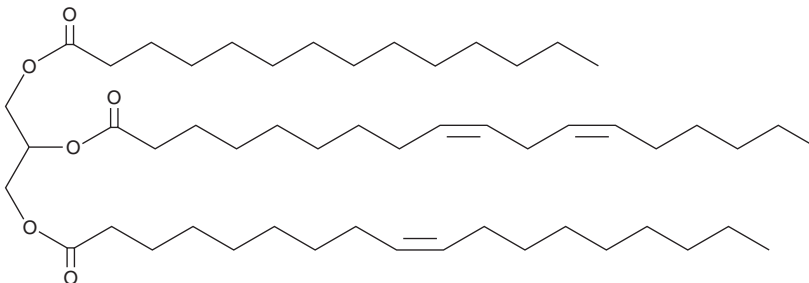
FW: 829.3

Purity: ≥98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

1-Myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol is supplied as a solution in ethanol. A stock solution may be made by dissolving the 1-myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol in the solvent of choice, which should be purged with an inert gas. 1-Myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol is soluble in the organic solvent dimethyl formamide (DMF). The solubility of 1-myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol in DMF is approximately 10 mg/ml.

1-Myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1-myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 1-Myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol 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

1-Myristoyl-2-linoleoyl-3-oleoyl-*rac*-glycerol is a triacylglycerol that contains myristic acid (Item No. 13351), linoleic acid (Item Nos. 90150 | 90150.1 | 21909), and oleic acid (Item Nos. 90260 | 24659) at the *sn*-1, *sn*-2, and *sn*-3 positions, respectively. It has been found in mature human milk, infant formula fats, and butterfat.^{1,2}

References

- Cheong, L.-Z., Jiang, C., He, X., *et al.* Lipid profiling, particle size determination, and in vitro simulated gastrointestinal lipolysis of mature human milk and infant formula. *J. Agric. Food Chem.* **66**(45), 12042-12050 (2018).
- Kalo, P., Kempainen, A., and Ollilainen, V. Determination of triacylglycerols in butterfat by normal-phase HPLC and electrospray-tandem mass spectrometry. *Lipids* **44**(2), 169-195 (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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