

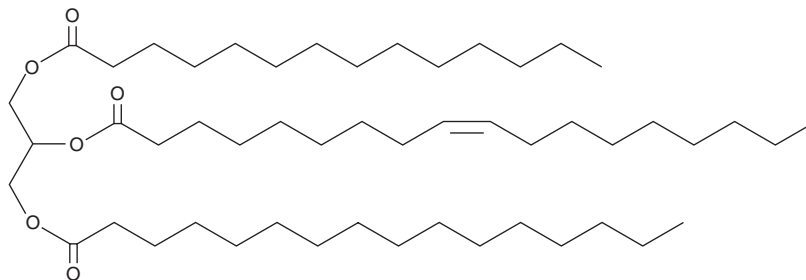
# PRODUCT INFORMATION



## 1-Myristoyl-2-Oleoyl-3-Palmitoyl-*rac*-glycerol

Item No. 29233

**CAS Registry No.:** 99131-43-8  
**Formal Name:** 9Z-octadecenoic acid, 1-[[[(1-oxohexadecyl)oxy]methyl]-2-[[[(1-oxotetradecyl)oxy]ethyl] ester  
**Synonyms:** 1-Myristin-2-Olein-3-Palmitin, TG(14:0/18:1/16:0)  
**MF:** C<sub>51</sub>H<sub>96</sub>O<sub>6</sub>  
**FW:** 805.3  
**Purity:** ≥95%  
**Supplied as:** A crystalline 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

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

1-Myristoyl-2-oleoyl-3-palmitoyl-*rac*-glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1-myristoyl-2-oleoyl-3-palmitoyl-*rac*-glycerol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 1-Myristoyl-2-oleoyl-3-palmitoyl-*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-oleoyl-3-palmitoyl-*rac*-glycerol is a triacylglycerol that contains myristic acid (Item No. 13351), oleic acid (Item Nos. 90260 | 24659), and palmitic acid (Item No. 10006627) at the *sn*-1, *sn*-2, and *sn*-3 positions, respectively. It has been found in butterfat and the fat body of male *B. hortorum* bumblebees.<sup>1,2</sup> 1-Myristoyl-2-oleoyl-3-palmitoyl-*rac*-glycerol has also been found as a minor triacylglycerol preserved in the subcutaneous fat of the 5,300-year-old Iceman mummy.<sup>2</sup>

### References

1. Kallio, H., Korkiasaari, K., Sjoval, O., *et al.* The regiospecific position of 18:1 *cis* and *trans* monoenoic fatty acids in milk fat triacylglycerols. *J. Am. Oil Chem. Soc.* **83**, 407-413 (2006).
2. Cvačka, J., Hovorka, O., Jiroš, P., *et al.* Analysis of triacylglycerols in fat body of bumblebees by chromatographic methods. *J. Chromatogr. A.* **1101(1-2)**, 226-237 (2006).

#### 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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