

PRODUCT INFORMATION



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

Item No. 26968

CAS Registry No.: 2190-14-9
Formal Name: 9Z,12Z-octadecadienoic acid, 2-[[[(9Z)-1-oxo-9-octadecen-1-yl]oxy]-3-[(1-oxooctadecyl)oxy]propyl ester
Synonyms: 1-Stearin-2-Olein-3-Linolein, TG(18:0/18:1/18:2)

MF: C₅₇H₁₀₄O₆

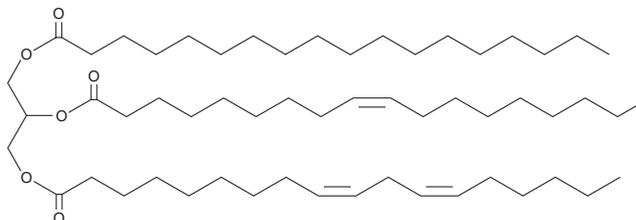
FW: 885.4

Purity: ≥95%

Supplied as: A 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-Stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol 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 1-stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol in these solvents is approximately 10 mg/ml. 1-Stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol is also slightly soluble in chloroform.

1-Stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 1-stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol should be diluted with the aqueous buffer of choice. 1-Stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol has a solubility of 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-Stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol is a triacylglycerol that contains stearic acid (Item No. 10011298), oleic acid (Item Nos. 90260 | 24659), and linoleic acid (Item Nos. 90150 | 90150.1 | 21909) at the *sn*-1, *sn*-2, and *sn*-3 positions, respectively. It has been found in peanut and soybean oils as well as ostrich and emu oils.^{1,2} 1-Stearoyl-2-oleoyl-3-linoleoyl-*rac*-glycerol has been used as a substrate for soybean lipoxigenase in cell-free assays.³

References

1. Wei, F., Ji, S.-X., Hu, N., *et al.* Online profiling of triacylglycerols in plant oils by two-dimensional liquid chromatography using a single column coupled with atmospheric pressure chemical ionization mass spectrometry. *J. Chromatogr. A.* **1312**, 69-79 (2013).
2. Zhou, Y., Xue, Y., Chen, G.C., *et al.* Rapid separation and characterisation of triacylglycerols in ostrich oil by ultra performance liquid chromatography coupled with quadrupole time-of-flight mass spectrometry. *Food Chem.* **141(3)**, 2098-2102 (2013).
3. Piazza, G.J. and Nunez, A. Oxidation of acylglycerols and phosphoglycerides by soybean lipoxigenase. *J. Am. Oil. Chem. Soc.* **72(4)**, 463-466 (1995).

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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