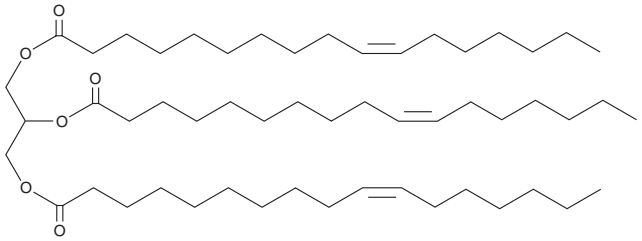
PRODUCT INFORMATION

1,2,3-Tri-10(Z)-Heptadecenoyl Glycerol

Item No. 26996

CAS Registry No.: 1094209-16-1
Formal Name: (10Z,10′Z,10′′Z)-10-heptadecenoic acid, 1,1′,1′′-(1,2,3-propanetriyl) ester
Synonyms: Glycerol Tri-10(Z)-Heptadecenoate, TG(17:1/17:1/17:1), Tri-10(Z)-Heptadecenoin
MF: $C_{54}H_{98}O_6$
FW: 843.4
Purity: ≥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

1,2,3-Tri-10(Z)-heptadecenoyl 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, chloroform, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 1,2,3-Tri-10(Z)-heptadecenoyl glycerol in chloroform is approximately 10 mg/ml. 1,2,3-Tri-10(Z)-heptadecenoyl glycerol is slightly soluble in ethanol, DMSO, and dimethyl formamide.

1,2,3-Tri-10(Z)-heptadecenoyl glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 1,2,3-Tri-10(Z)-heptadecenoyl glycerol should be diluted with the aqueous buffer of choice. 1,2,3-Tri-10(Z)-heptadecenoyl glycerol has a solubility of 0.25 mg/ml in a 1:3 solution of chloroform:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

1,2,3-Tri-10(Z)-heptadecenoyl glycerol is a triacylglycerol that contains 10(Z)-heptadecenoic acid (Item No. 19748) at the *sn*-1, *sn*-2, and *sn*-3 positions. It has been used as an internal standard for the quantification of triglycerides in green microalgae and phospholipid bilayers.[1,2]

References

1. Allen, J.W., DiRusso, C.C., and Black, P.N. Triglyceride quantification by catalytic saturation and LC–MS/MS reveals an evolutionary divergence in regioisometry among green microalgae. *Algal Res.* **5(1)**, 23-31 (2014).
2. Duelund, L., Jensen, G.V., Hannibal-Bach, H.K., *et al.* Composition, structure and properties of POPC-triolein mixtures. Evidence of triglyceride domains in phospholipid bilayers. *Biochim. Biophys. Acta* **1828(8)**, 1909-1917 (2013).

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