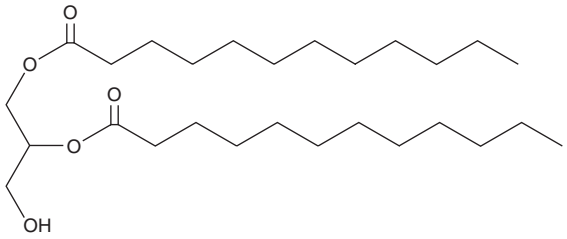
PRODUCT INFORMATION

1,2-Dilauroyl-*rac*-glycerol

Item No. 26846

CAS Registry No.:	17598-94-6
Formal Name:	dodecanoic acid, 1-(hydroxymethyl)-1,2-ethanediyl ester
Synonyms:	DG(12:0/12:0/0:0), 1,2-Didodecanoyl-*rac*-glycerol, 1,2-Dilaurin
MF:	$C_{27}H_{52}O_5$
FW:	456.7
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

1,2-Dilauroyl-*rac*-glycerol is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-dilauroyl-*rac*-glycerol in the solvent of choice, which should be purged with an inert gas. 1,2-Dilauroyl-*rac*-glycerol is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 20 mg/ml.

1,2-Dilauroyl-*rac*-glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1,2-dilauroyl-*rac*-glycerol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 1,2-Dilauroyl-*rac*-glycerol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

1,2-Dilauroyl-*rac*-glycerol is a diacylglycerol that contains lauric acid (Item No. 10006626) at the *sn*-1 and *sn*-2 positions. It has been used as an internal standard for the quantification of diacylglycerols in rat desheathed sciatic nerves.[1] Monomolecular films containing 1,2-dilauroyl-*rac*-glycerol have been used as substrates to measure the effects of surface pressure and pancreatic procolipase and colipase on the activity of porcine pancreatic lipase.[2]

References

1. Zhu, X. and Eichberg, J. 1,2-Diacylglycerol content and its arachidonyl-containing molecular species are reduced in sciatic nerve from streptozotocin-induced diabetic rats. *J. Neurochem.* **55(3)**, 1087-1090 (1990).
2. Wieloch, T., Borgström, B., Piéroni, G., *et al.* Porcine pancreatic procolipase and its trypsin-activated form: Lipid binding and lipase activation on monomolecular films. *FEBS Lett.* **128(2)**, 217-220 (1981).

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