

PRODUCT INFORMATION



1,2-Dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-PE

Item No. 25589

CAS Registry No.: 3922-61-0

Formal Name: hexadecanoic acid, 1,1'-[(1R)-1-(3-hydroxy-7-methyl-3-oxido-2,4-dioxo-7-aza-3-phosphaoct-1-yl)-1,2-ethanediyl] ester

Synonyms: 16:0 Dimethyl PE, 1,2-Dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-Phosphoethanolamine, 1,2-N,NMe₂DPPE

MF: C₃₉H₇₈NO₈P

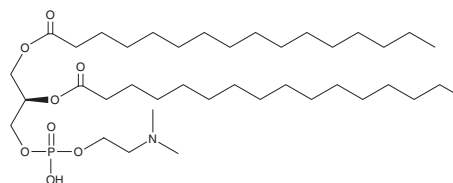
FW: 720.0

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-Dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-PE is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-PE in the solvent of choice, which should be purged with an inert gas. 1,2-Dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-PE is soluble in the organic solvent chloroform at a concentration of approximately 3 mg/ml.

Description

1,2-Dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-PE is a form of 1,2-dipalmitoyl-*sn*-glycero-3-PE (1,2-DPPE; Item No. 15092) that contains two methyl groups on the *sn*-3 moiety. In aqueous suspensions, it lowers the phase transition temperature compared with aqueous suspensions of 1,2-DPPE and 1,2-dipalmitoyl-*sn*-glycero-3-N-methyl-PE (1,2-NMeDPPE; Item No. 26010).¹ 1,2-Dipalmitoyl-*sn*-glycero-3-N,N-dimethyl-PE has been used in the generation of liposomes and monolayers for use in the study of membrane permeability and monolayer viscosity, respectively.^{2,3}

References

1. Chowdhry, B.Z. and Dalziel, A.W. Phase transition properties of 1,2- and 1,3-diacylphosphatidylethanolamines with modified head groups. *Biochemistry* **24**(15), 4109-4117 (1985).
2. Singer, M. Permeability of phosphatidylcholine and phosphatidylethanolamine bilayers. *Chem. Phys. Lipids* **28**(3), 253-267 (1981).
3. Evans, R.W. Aggregates of saturated phospholipids at the air-water interface. *Chem. Phys. Lipids* **78**(2), 163-175 (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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