

PRODUCT INFORMATION



1,2-Dimyristoyl-*sn*-glycero-3-phosphoserine

Item No. 45357

CAS Registry No.: 64023-32-1

Formal Name: (2S,8R)-2-amino-5-hydroxy-11-oxo-8-
[(1-oxotetradecyl)oxy]-4,6,10-trioxa-5-
phosphatetracosanoic acid, 5-oxide

Synonyms: 1,2-Dimyristoyl Phosphatidylserine,
1,2-Ditetradecanoyl-*sn*-glycero-3-phosphoserine,
1,2-DMPS, PS(14:0/14:0), PtdSer-(1,2-dimyristoyl)

MF: $C_{34}H_{66}NO_{10}P$

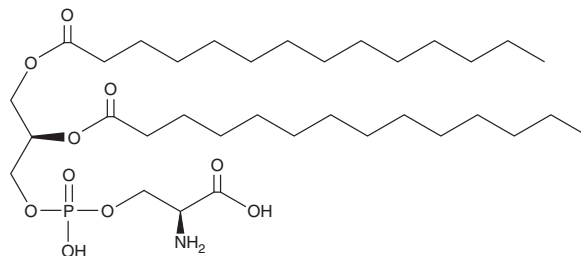
FW: 679.9

Purity: $\geq 95\%$

Supplied as: A 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-Dimyristoyl-*sn*-glycero-3-phosphoserine (1,2-DMPS) is supplied as a solid. A stock solution may be made by dissolving the 1,2-DMPS in the solvent of choice, which should be purged with an inert gas. 1,2-DMPS is slightly soluble (0.1-1 mg/ml) in a 1:1 solution of chloroform:methanol.

Description

1,2-DMPS is an anionic glycerophospholipid containing myristic acid (Item Nos. 13351 | 45445) at the *sn*-1 and *sn*-2 positions. It can be used in the generation of micelles, liposomes, and other types of artificial membranes.^{1,2}

References

1. Mattai, J., Hauser, H., Demel, R.A., *et al.* Interactions of metal ions with phosphatidylserine bilayer membranes: Effect of hydrocarbon chain unsaturation. *Biochemistry* **28**(5), 2322-2330 (1989).
2. Tapia, M.J., Monteserin, M., Burrows, H.D., *et al.* Effect of the phospholipid chain length and head group on beta-phase formation of poly(9,9-dioctylfluorene) enclosed in liposomes. *Photochem. Photobiol.* **89**(6), 1471-1478 (2013).

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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