

PRODUCT INFORMATION



Cardiolipin (14:0/14:0/14:0/14:0) (sodium salt)

Item No. 39279

CAS Registry No.: 63988-21-6

Formal Name: tetradecanoic acid, 1,1',1'',1'''-(5,8,11-trihydroxy-5,11-dioxido-4,6,10,12-tetraoxa-5,11-diphosphapentadecane-1,2,14,15-tetrayl) ester, disodium salt

Synonyms: 14:0 Cardiolipin, 56:0-CL, Diphosphatidylglycerol (14:0), Tetramyristoyl Cardiolipin, TMCL

MF: $C_{65}H_{124}O_{17}P_2 \cdot 2Na$

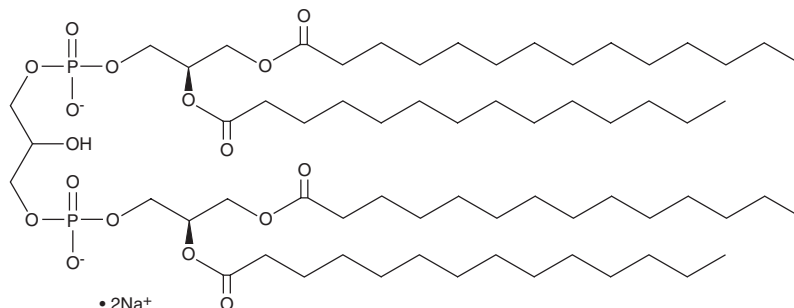
FW: 1,285.6

Purity: $\geq 98\%$

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cardiolipin (14:0/14:0/14:0/14:0) (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the cardiolipin (14:0/14:0/14:0/14:0) (sodium salt) in the solvent of choice, which should be purged with an inert gas. Cardiolipin (14:0/14:0/14:0/14:0) (sodium salt) is slightly soluble (0.1-1 mg/ml) in methanol, chloroform, and acetonitrile.

Description

Cardiolipin (14:0/14:0/14:0/14:0) is an anionic phospholipid containing the long-chain saturated fatty acid myristic acid (Item No. 13351).¹ Cardiolipin (14:0/14:0/14:0/14:0) in combination with apolipoprotein A1 (ApoA1) forms nanodisk bilayers, which undergo calcium chloride-induced transformation to non-bilayers. It increases the liposome membrane gel-to-liquid transition temperature in a concentration-dependent manner.²

References

1. Fox, C.A., Ellison, P., Ikon, N., *et al.* Calcium-induced transformation of cardiolipin nanodisks. *Biochim. Biophys. Acta Biomembr.* **1861**(5), 1030-1036 (2019).
2. Beriashvili, D., Taylor, R., Kralt, B., *et al.* Mechanistic studies on the effect of membrane lipid acyl chain composition on daptomycin pore formation. *Chem. Phys. Lipids* **216**, 73-79 (2018).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/25/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM