

## Product Data Sheet

Product Name: DSPE-Polysarcosine50

Cat. No.: GC91873

### Chemical Properties

Cas. No.

Chemical Name (2R)-3-((hydroxy(2-(2-(N-methyl-2-(methylamino)acetamido)acetamido)ethoxy)phosphoryl)oxy)propane-1,2-diyl distearate

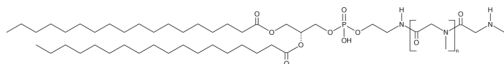
SMILES CCCCCCCCCCCCCCCCCCCC(OC[C@H](COP(O)(OCCNC(CN(C)C(CNC)=O)=O)=O)OC(CCCCCCCCCCCCCCCCCC)=O)=O

Formula  $(C_3H_5NO)_n C_{44}H_{87}N_2O_9P$  M.Wt

Solubility Chloroform: Soluble Storage  $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at  $37^{\circ}C$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}C$  for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure 

### Background

DSPE-polysarcosine50 is an amine-functionalized hydrophilic polymer.<sup>1</sup> It is a polysarcosine-labeled form of 1,2-distearoyl-*rac*-glycero-3-PE (DSPE). Polysarcosines have been used as alternatives to PEGylation in lipid nanoparticles (LNPs) and to reduce the immunogenicity of administered proteins *in vivo*.<sup>1,2</sup>

### References:

- [1]. Nogueira, S.S., Schlegel, A., Maxeiner, K., et al. Polysarcosine-functionalized lipid nanoparticles for therapeutic mRNA delivery ACS Appl. Nano Mater. 3(11)10634-10645(2020).
- [2]. Hu, Y., Hou, Y., Wang, H., et al. Polysarcosine as an alternative to PEG for therapeutic protein conjugation Bioconjug. Chem. 29(7)2232-2238(2018).

**Caution: Product has not been fully validated for medical applications. For research use only.**

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