

Product data sheet



MedKoo Cat#: 414872 Name: DSPC CAS#: 816-94-4 Chemical Formula: C ₄₄ H ₈₈ NO ₈ P Exact Mass: 789.6248 Molecular Weight: 790.16		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

DSPC has been used in many FDA approved liposomal drugs including COVID 19 vaccines. It is a phospholipid containing the saturated long-chain (18:0) stearic acid inserted at the sn-1 and sn-2 positions. It is commonly used in the generation of micelles, liposomes, and other types of artificial membranes. DSPC has a relatively high main phase transition temperature (55.6 °C). DSPC has been widely used to construct liposomes, including, Lipo-Dox®, DaunoXome®, Vyxeos®, and ONPATTRO®. In some cases, DSPC and HSPC are interchangeable.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
Ethanol	25.0	31.64

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.27 mL	6.33 mL	12.66 mL
5 mM	0.25 mL	1.27 mL	2.53 mL
10 mM	0.13 mL	0.63 mL	1.27 mL
50 mM	0.03 mL	0.13 mL	0.25 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

In vivo study

7. Bioactivity

Biological target: 1,2-Distearoyl-sn-glycero-3-PC is a phospholipid containing the saturated long-chain (18:0) stearic acid inserted at the sn-1 and sn-2 positions, commonly used in the generation of micelles, liposomes, and other types of artificial membranes.

In vitro activity

In vivo activity

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Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.