

#### **TECHNICAL DATA SHEET**

# DSPE PEG Maleimide, MW 1000, 2000, 3400, 5000, 10k, 20k

Catalog Numbers: PG2-DSML-1k, 2k, 3k, 5k, 10k, 20k.

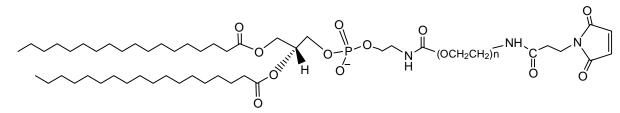
CAS number: 474922-22-0

Synonym: 1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-polyethylene glycol maleimide

# **Description:**

**DSPE PEG Maleimide** is one of Nanocs premier reactive phospholipid PEG derivatives that can react with sulfhydryl groups. DSPE (1,2-distearoyl-sn-glycero-3-phosphoethanolamine) is an 18 carbon phospholipid that is highly hydrophobic. PEG backbone, on the other hand, offers good hydrophilicity and water solubility. Maleimide functionalized DSPE PEG has excellent reactivity towards sulfhydryl/thiol group derived from cysteine and the reaction proceeds easily at neutral pH. DSPE PEG maleimide is one of most commonly used reactive phospholipids to conjugate antibodies, peptides or other ligands to the surface of liposome and other lipid PEG nanoparticles. Pegylated phospholipids significantly prolong the blood circulation time and stability for encapsulated drugs. Nanocs has developed a comprehensive collection of thiol reactive maleimide phospholipid PEG products that have high purity, various molecular weights and excellent chemical reactivity. These lipid PEG conjugates demonstrate excellent amphilphilic properties and offer superior advantages for small and large molecule drug development and delivery.

### Product Structure:



# Product Specifications:

- Composition: DSPE PEG Maleimide.
- Appearance: White to off-white solid.
- Solubility: >10 mg/mL in hot water, chloroform, ethanol, etc.
- Stability: 6 months at -20 °C.

### Handling and Use:

**DSPE PEG Maleimide** undergoes hydrolysis at elevated temperature and moisture. Maleimide PEG should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For more information about using this product, please visit **www.nanocs.net**.

### Storage Conditions:

Product should be stored at -20 <sup>o</sup>C. Desiccate.

#### This product is for research and manufacturing use only and is not intended for use in humans or for diagnostic use.

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