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#### **TECHNICAL DATA SHEET**

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

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

CAS number: N/A

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

## **Description:**

**DSPE PEG NHS** is one of Nanocs premier reactive phospholipid PEG conjugates that can react with primary amine 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. Succinimidyl ester (NHS) on the PEG terminal reacts with primary amine groups efficiently at pH 8~10. DSPE PEG NHS can be easily incorporated into liposome and other nanoparticles for drug delivery applications. Incorporated DSPE PEG NHS can be used to attach antibodies, peptides and other functional ligands on the surface of those nanoparticles. Pegylated phospholipids significantly prolong the blood circulation time and stability for encapsulated drugs. Nanocs offers a large selection of amine reactive NHS 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 NHS.

Appearance: White to off-white solid.

Solubility: 10 mg/mL in hot water, chloroform, ethanol, DMSO, clear.

Stability: 6 months at -20 °C.

## **Handling and Use:**

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

### **Storage Conditions:**

Product should be stored at -20 °C. Desiccate.

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

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