Tel: 1(800)388-4221 Fax: 1(917)591-2212 Email: info@nanocs.com

#### **TECHNICAL DATA SHEET**

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

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

Synonym: Aldehyde PEG DSPE, DSPE PEG CHO

#### **Description:**

**DSPE PEG aldehyde** is one of Nanocs' reactive phospholipid PEG derivatives that can react with N-terminus 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. **Aldehyde PEG DSP**E is a reactive lipid PEG with good reactivity towards amine, oxyamine or hydrazide groups. Aldehyde reacts with N-terminus amine groups to form an intermediate Schiff base. Further reduction with hydride will form a stable C-N bond. Aldehyde PEG DSPE allows conjugation of DSPE PEG to amine or hydrazide group at acidic conditions with good selectivity. Higher pH will result in multiple pegylation with amine groups.

#### **Product Structure:**

## **Product Specifications:**

Composition: DSPE PEG Aldehyde.

Appearance: White to off white solid.

Soluble in hot water, chloroform, DMSO, etc.

Reactive group: Aldehyde.

### Handling and Use:

For best use, **DSPE PEG aldehyde** 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, visit **www.nanocs.net.** 

#### **Storage Conditions:**

**Aldehyde PEG DSPE** should be stored at -20 °C. Desiccate. Re-test material after 6 months.

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

The information given in this document is to the best of our knowledge accurate, but no warranty is expressed or implied. It is the user's responsibility to determine the suitability for their own use of the products described herein, and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as a recommendation to use any product or to practice any process in violation of any law or any government regulation.