

#### **TECHNICAL DATA SHEET**

# Palmitic Acid PEG Maleimide, MW 2000, 3400, 5000, 10k, 20k

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

Synonym: Maleimide PEG Palmitic acid

# **Description:**

**Palmitic acid PEG Maleimide** is one of Nanocs' thiol reactive fatty acid lipid PEG derivatives that have a terminal maleimide group. Palmitic acid is a saturated 16 carbon fatty acid with high hydrophobicity. PEG backbone, on the other hand, offers good hydrophilicity. Maleimide functionalized Palmitic acid PEG can readily react with sulfhydryl group at pH 6.5-7.5 to form a stable thiolether bond. Reaction between maleimide and thiol enables quick and efficient conjugation of PEG palmitic acid with other molecules or materials. PEG linker between Palmitic acid and Maleimide offers better water solubility, flexible linker structure and enhanced stability. Pegylated fatty acid lipids are excellent liposome formulation materials that can be used for drug encapsulation, gene transfection and vaccine delivery. Reactive PEG lipids can also be used for targeted drug delivery carriers by modifying their surfaces with targeting ligands such as antibodies, peptides. Pegylate lipids show significantly improved stability and blood circulation time for encapsulated drugs.

## Product Structure:



#### Product Specifications:

- Composition: Palmitic Acid PEG Maleimide.
- Appearance: White to off white solid.
- Solubility: Soluble in hot water, chloroform, toluene, etc.
- Reactive group: Maleimide.
- Reactive to: Sulfhydryl.

#### Handling and Use:

**Palmitic acid PEG Maleimide** 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:**

Maleimide PEG Palmitic acid should be stored at -20 <sup>o</sup>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.

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