

#### **TECHNICAL DATA SHEET**

# Methoxy polyethylene plycol aldehyde, mPEG-CHO

Catalog Numbers: PG1-AL-350, 550, 750, 1k, 2k, 5k, 10k, 20k, 30k, 40k.

Synonym: mPEG aldehyde, mPEG-CHO, Aldehyde PEG, mPEG propionaldehyde.

# **Description:**

Aldehyde (CHO) functionalized methoxy polyethylene glycol (**mPEG-aldehyde**) is one of Nanocs' site specific pegylation reagents that can react with N-terminus amine (-NH<sub>2</sub>) groups at acidic pH, a condition required sometime by certain special pegylation needs. Aldehyde PEG reacts with  $\epsilon$ -amine of lysine residues and the a-amine at the N-terminus produces an intermediate Schiff base. Further reduction with hydride results a stable C-N bond. Reaction between PEG aldehydes and amine occurs at pH from 5.5 to 9.5. Higher pH will result in multiple Pegylation with both terminal and lysine groups reactive PEG derivative that can be used to modify protein, peptide or any other surfaces.

# Product Structure:

mPEG-CH<sub>2</sub>CH<sub>2</sub>-CHO

### **Product Specifications:**

- Composition: mPEG aldehyde.
- Appearance: White/Off-white solid or semisolid depends on molecular weight.
- Solubility: Soluble in water, ethanol, chloroform, DMSO, etc.
- Reactive group: Aldehyde.

#### Handling and Use:

**mPEG 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** should be stored at -20 <sup>o</sup>C. Desiccate. Materials may be handled under inert gas for best stability.

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

#### Related Products:

mPEG NHS mPEG COOH mPEG biotin mPEG DSPE mPEG Maleimide mPEG Thiol mPEG Azide

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