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

#### **TECHNICAL DATA SHEET**

# Methoxy Polyethylene Glycol Nitrophenyl Carbonate, mPEG-NPC

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

Synonym: Methoxy PEG NPC, methoxyPEG NPC ester

### **Description:**

Nitrophenyl carbonate (NPC) functionalized methoxy polyethylene glycol (mPEG-NPC) is an amine (-NH<sub>2</sub>) reactive PEG derivative that can be used to modify proteins, peptides or other materials with via their available amino groups. NPC PEG reacts with primary amine groups at pH 7~10 to form a stable amide bond. PEG NPC esters reacts with deprotonated primary amines, therefore, the reaction requires neutral to basic pH values to proceed. Primary amines react with NPC esters by nucleophilic attack and NPC is released as a byproduct. Hydrolysis of the NPC-ester competes with the reaction in aqueous solution and increases with increasing pH.

# **Product Structure:**

more information about using this product, visit www.nanocs.net.

#### **Storage Conditions:**

Product should be stored at -20 °C. Desiccate. Protect from light. Materials may be handled under inert gas for best stability. 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.

# **Related Products:**

 $\begin{array}{lll} \text{mPEG NHS} & \text{mPEG NH}_2 \\ \text{mPEG Maleimide} & \text{mPEG Maleimide} \\ \text{mPEG thiol} & \text{mPEG aldehyde} \\ \end{array}$ 

# Product Specifications:

Composition: mPEG nitrophenyl carbonate.

• Appearance: White/Off-white solid or semi-

solid depends on molecular weight.

• Purity: > 95%;

Solubility: Soluble in water, chloroform,

DMSO, DMF, etc.

Stability: 6 months at -20 °C.

#### Handling and Use:

**PEG NPC** esters readily undergo hydrolysis at elevated temperature. Material should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For

To Order:

Order online: www.nanocs.net

Order by Email: sales@nanocs.com

Order by phone: 1(800) 388-4221; 1(888)

908-8803

For more information, visit www.nanocs.net

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.