

#### **TECHNICAL DATA SHEET**

# Bis-succinimidyl Polyethylene Glycol Ester, NHS-PEG-NHS

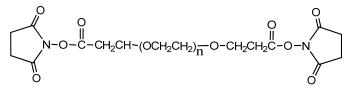
Catalog Numbers: PG2-NS-400, 600, 1k, 2k, 5k, 10k, 20k, 30k, 40k.

Synonym: Bis-NHS PEG

# **Description:**

Bis-N-hydroxylsuccinimide (NHS) functionalized polyethylene glycol (NHS-PEG-NHS) is an amine (-NH<sub>2</sub>) reactive PEG cross-linker that contains two NHS groups on each PEG molecule. NHS ester reacts with primary amine groups at alkaline pH to form a stable amide bond. Bifunctional NHS PEG is an excellent homobifunctional PEG crosslinker that enables the conjugation of two amine-containing molecules guickly and efficiently. Primary amines react with NHS esters by nucleophilic attack and NHS is released as a byproduct. Hydrolysis of the NHS-ester competes with the reaction in aqueous solution and increases with increasing pH. Compared to other PEG NHS ester derivatives, Nanocs' NHS-PEG-NHS offers superior reactivity and higher stability in aqueous solution. This PEG crosslinker is a useful pegylation reagent to modify proteins, antibodies, peptides and particles.

### **Product Structure:**



### **Product Specifications:**

- Composition: NHS PEG NHS.
- Appearance: White/Off-white solid or viscous semi-solid depends on molecular weight.
- Solubility: 10 mg/mL, clear in water, chloroform, DMSO.
- Reactive group: NHS.
- Reactive to: Primary amine.

## Handling and Use:

**NHS PEG** readily undergoes hydrolysis at elevated temperature and moisture. Material 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:

**NHS PEG NHS** should be stored at -20 <sup>o</sup>C. Desiccate. 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:**

Biotin PEG NHS NHS PEG COOH NHS PEG DBCO FITC PEG NHS Maleimide PEG NHS NHS PEG Biotin

| To Order:                                  |                                     |
|--|-------------------------------------|
| Order online:                              | www.nanocs.net                      |
| Order by Email:                            | sales@nanocs.com                    |
| Order by phone:                            | 1(800) 388-4221; 1(888)<br>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.