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#### **TECHNICAL DATA SHEET**

# mPEG-OPSS, MW 1000, 2000, 5000, 10k, 20k, 30k, 40k

Catalog Numbers: PG1-OS-1k, 2k, 5k, 10k, 20k, 30k, 40k.

Synonym: mPEG PDP, PDP PEG, OPSS PEG, Pyridyldithio PEG

#### **Description:**

mPEG-OPSS is one of Nanocs' reactive PEG derivatives that can react with sulfhydryl groups. OPSS (orthopyridyl disulfide), sometimes called PDP, is a pyridyldisulfide group that reacts quickly with free thiol at pH 4.5-8.5. Reaction of pyridyldisulfide and thiol forms a cleavalbe disulfide bond. Meanwhile, a UV thiopyridine (Pyridine detectable 2-thione) intermediate is released during reaction. This species has a characteristic UV absorption at 343 nm and it can be used to monitor the progression of the reaction. PEG linked OPSS shows good water solubility and high thiol reactivity. It is an excellent site-specific pegylation reagent that can selectively react with cysteine residue quickly and efficiently. It may also be used to quantify sulfhydryl groups.

#### **Product Structure:**

$$CH_3O-(CH_2CH_2O)_0$$
  $S-S-$ 

### **Handling and Use:**

**OPSS PEG** 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:**

**mPEG OPSS** should be stored at -20 <sup>o</sup>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:**

OPSS PEG NHS
OPSS PEG NH2
OPSS PEG Biotin
OPSS PEG COOH

# Product Specifications:

Composition: mPEG-OPSS.

Appearance: White/off-white solid, semi-solid

depends on molecular weight.

■ Purity: > 95%.

Solubility: 10 mg/mL, clear in water,

chloroform, DMSO, etc.

Reactive group: OPSS.

Reactive to: Sulfhydryl.

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