

#### **TECHNICAL DATA SHEET**

# Methoxy PEG Vinyl sulfone, mPEG-VS

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

Synonym: Vinylsulfone PEG, mPEG Vinylsulfone

## **Description:**

Vinyl sulfone (VS) functionalized methoxypolyethylene glycol (**mPEG-Vinyl sulfone**) is a sulfhydryl/thiol (-SH) reactive PEG derivative which can be used to modify proteins or peptides via their available sulfhydryl functional groups. Vinyl sulfone functional methoxy PEG derivatives have a VS group on each PEG molecule and it reacts readily with available free thiol groups at pH 6.5~7.5 to form a stable thiolether bond. Vinyl sulfone group can also react with amine and hydroxyl groups at higher pH. Reaction of vinylsulfone to other functional groups allows quick and efficient conjugation of PEG chain to targeted molecules. PEGylation can increase s stability and reduce immunogenicity of modified peptides and proteins. It can also suppress the non-specific binding of charged molecules to the modified surfaces.

### Handling and Use:

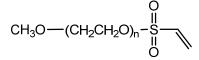
**Vinyl sulfone PEG** derivatives undergo hydrolysis at elevated temperature. Material should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For more information about using this product, visit www.nanocs.net.

### Storage Conditions:

**PEG Vinyl sulfone PEG** 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.

# Product Structure:



### Product Specifications:

- Composition: mPEG vinyl sulfone.
- Appearance: White/Off-white solid or semisolid depends on molecular weight of PEG.
- Solubility: Soluble in water, chloroform, DMSO, etc.
- Reactive group: Vinyl sulfone.

<u>To Order:</u>	
Order online:	www.nanocs.net
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Order by phone:	1(800) 388-4221; 1(888) 908-8803
For more information, visit www.nanocs.net	

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