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TECHNICAL DATA SHEET

Vinylsulfone PEG NHS, MW 1000, 2000, 3400, 5000, 10k, 20k

Catalog Numbers: PG2-NSVS-1k, 2k, 3k, 5k, 10k, 20k.

Synonym: NHS PEG Vinylsulfone, VS PEG NHS, NHS PEG VS

Description:

Vinylsulfone PEG NHS (VS-PEG-NHS) is one of Nanocs' heterobifunctional PEG crosslinkers that contain a terminal vinylsufone and a NHS group on each PEG terminus. VS PEG NHS enables the conjugation of thiol and amine containing molecules quickly and efficiently. Vinylsulfone reacts fast with sulfhydryl group at pH 7. It can also react with amine and hydroxyl groups at alkaline pH. Meanwhile, NHS reacts with primary amine groups at pH 7.5~10.0 quickly. Hydrolysis of NHS ester competes with the reaction in aqueous solution. PEG linker between vinyl sulfone and NHS offers better water solubility, less steric hydrance and enhanced stability. Compared to other crosslinkers, Nanocs' crosslinkers have higher reactivity, more stable and easy to use; all crosslinking reactions can be carried out in aqueous buffer without adding any organic solvents.

Product Structure:

$$\begin{array}{c}
O \\
\parallel \\
S \\
-(CH_2CH_2O)_n \\
-C \\
-O \\
-N
\end{array}$$

Product Specifications:

Composition: Vinyl sulfone PEG NHS.

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

depends on molecular weight.

Solubility: Soluble in water, chloroform,

DMSO, etc.

Reactive group: Vinyl sulfone, NHS.

Reactive to: Thiol, amine

Handling and Use:

Vinyl sulfone PEG NHS is sensitive to moisture and temperature. For best use, 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 Vinyl sulfone should be stored at -20 °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.

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

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