

TECHNICAL DATA SHEET

Silane PEG COOH, MW 600, 1000, 2000, 3400, 5000, 10k, 20k

Catalog Numbers: PG2-CASL-600, 1k, 2k, 3k, 5k, 10k, 20k.

Synonym: Silane PEG acid, Carboxylic PEG Silane, Triethoxysilane PEG acid, Trimethoxysilane PEG acid

Description:

Silane PEG carboxylic acid (Silane PEG COOH) is one of Nanocs' surface reactive polyethylene glycol silanization and pegylation reagents that contain a terminal triethoxysilane and a carboxylic group. Silane PEG COOH can be used to modify glass, silica and other surfaces via the reaction between hydroxyl group and alkoxyl silane groups. Triethoxyl or trimethoxyl silane reacts with OH groups easily with catalytic amount of water. Meanwhile, carboxylic group can be activated to react with amine or hydroxy groups. PEG linker between alkoxysilane and maleimide group offers better water solubility, less steric hindrance and enhanced reactivity. Compared to other organic silanes, Nanocs' silane PEGs are soluble in aqueous solution, all silanization reactions can be performed in aqueous solution without adding any organic solvents. Alkoxyl groups hydrolyze readily in aqueous solution and reaction can be completed at room temperature in 30~60 min.

Product Structure:

 $\begin{array}{c} \mathsf{CH}_3\mathsf{CH}_2\mathsf{O} & \mathsf{O} \\ \mathsf{H}_3\mathsf{CH}_2\mathsf{O} - \mathsf{Si} - \mathsf{CH}_2\mathsf{CH}_2\mathsf{N}\mathsf{H}_{\mathsf{C}}^\mathsf{H}\mathsf{N}\mathsf{H} - \mathsf{CH}_2\mathsf{C}\mathsf{H}_2 - (\mathsf{O}\mathsf{C}\mathsf{H}_2\mathsf{C}\mathsf{H}_2)_{\mathsf{n}} - \mathsf{C}\mathsf{O}\mathsf{O}\mathsf{H} \\ \mathsf{H}_3\mathsf{C}\mathsf{H}_2\mathsf{O} \end{array}$

Product Specifications:

- Composition: Silane PEG COOH.
- Appearance: White/off-white solid, semi-solid depends on molecular weight.
- Solubility: 10 mg/mL, clear in water, ethanol, chloroform, DMSO, etc.
- Reactive groups: Triethoxysilane and COOH.

Handling and Use:

Silane PEG acid 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:

Silane PEG COOH should be stored at -20 ^oC or lower. Desiccate. Avoid contact with any water. Materials may be handled under inert gas for best stability. Re-test material after 3-6 months.

This product is for research use only and is not intended for use in humans or for diagnostic use.

Related Products:

Silane PEG NH2Silane PEG NHSSilane PEG AzideSilane PEG FITCSilane PEG MaleimideSilane PEG Biotin

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