Tel: 1(800)388-4221 Fax: 1(917)591-2212 Email: info@nanocs.com

TECHNICAL DATA SHEET

Silane PEG NH₂, MW 400, 600, 1000, 2000, 3400, 5000, 10k, 20k

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

Synonym: Silane PEG amine, Amino PEG Silane, NH2 PEG Silane, triethoxysilane PEG amine, trimethoxysilane PEG amine

Description:

Silane PEG amine (Silane-PEG-NH2) is one of Nanocs' surface reactive polyethylene glycol pegylation reagents that contain a terminal triethoxysilane and an amine group. Silane PEG amine can be used to modify glass, silica and other material surfaces via the reaction between hydroxyl group and alkoxyl silane group. Triethoxyl, trimethoxyl or other alkoxyl silane reacts with -OH groups easily with catalytic amount of water. Meanwhile, primary amine group enables conjugation of other functional ligands to immobilized silane PEGs. PEG linker between alkoxysilane and amine group offers better water solubility, less steric hindrance and enhanced reactivity. Compared to other organic silane molecules, Nanocs' silane PEG derivatives are hydrophilic and biocompatible. 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:

$$\begin{array}{ccc} \mathrm{CH_3CH_2O} & & \mathrm{O} \\ \mathrm{I} & \mathrm{II} \\ \mathrm{CH_3CH_2O-Si-CH_2CH_2NHCNH-CH_2CH_2-(OCH_2CH_2)_n-NH_2} \\ \mathrm{I} & \mathrm{CH_3CH_2O} \end{array}$$

Product Specifications:

Composition: Silane PEG amine.

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

depends on molecular weight.

Solubility: 10 mg/mL, clear in water,

ethanol, chloroform, DMSO, etc.

• Reactive groups: Alkoxysilane and amine.

Handling and Use:

Silane PEG amine 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 amine should be stored at -20 °C or lower. Desiccate. Materials may be handled under inert gas for best stability. Re-test material after 3 months.

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

Related Products:

Silane PEG COOH
Silane PEG NHS
Silane PEG Azide
Silane PEG Maleimide
Silane PEG Biotin

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

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.