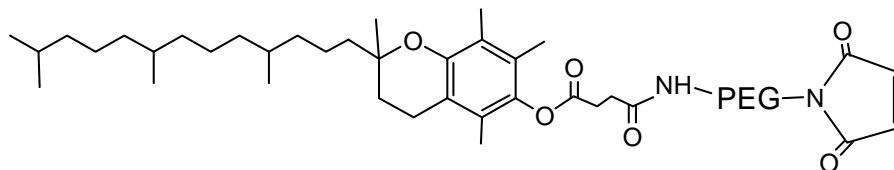


**TECHNICAL DATA SHEET****Vitamin E PEG Maleimide, MW 1k, 2k, 3400, 5k, 10k, 20k**

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

Synonym: *alpha*-tocopherol PEG maleimide, tocopherol PEG maleimide, Maleimide PEG tocopherol**Description:**

**Vitamin E PEG maleimide** is a water soluble, bioactive PEG derivative that can react with sulfhydryl groups. Vitamin E, only called **tocopherol**, is a series ( $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$ ) of chiral organic molecules that vary in their degree of methylation of the phenol moiety of the chromanol ring. Tocopherols are lipid soluble anti-oxidants that protect cell membranes from oxidative damage. Among them,  **$\alpha$ -Tocopherol**, is the most biologically active vitamin E form. Polyethylene glycol modified vitamin E derivatives offered by Nanocs are mainly from the modification of  $\alpha$ -Tocopherol. **Maleimide** functionalized vitamin E PEG derivatives are able to react with free sulfhydryl groups (-SH) at pH 6.5-7.5 in aqueous solution. This reaction allows conjugation of **alpha-tocopherol** molecule to proteins, antibodies and many other biomolecules via a flexible PEG chain. Nanocs' **vitamin E PEG** derivatives have good water solubility yet remain the functionalities of vitamin E. Our vitamin E PEG derivatives have been used successfully in cell membrane imaging, liposome particle formation and many other applications. As a leading vitamin PEG provider, Nanocs now offers a variety of functionalized PEG with different vitamin molecules.

**Product Structure:****Product Specifications:**

- Composition: **Vitamin E PEG Maleimide**, *alpha*-tocopherol PEG Maleimide.
- Appearance: White to off-white solid or semi-solid depends on molecular weight.
- Solubility: Soluble in water, chloroform, DMSO.
- Reactive group: Maleimide.
- Reactive to: Free thiol/Sulfhydryl.

**Handling and Use:**

**Tocopherol PEG maleimide** 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](http://www.nanocs.net).

**Storage Conditions:**

**Maleimide PEG Vitamin E** should be stored at -20 °C. Desiccate. Protect from light. 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.**

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