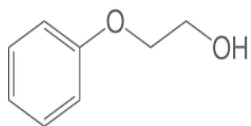


# TECHNICAL DATA SHEET

# NOVAGUARD PEG



Phenoxyethanol



Triethylene glycol

<b>Brand Name:</b>	NOVAGUARD PEG
<b>INCI Name:</b>	Phenoxyethanol Triethylene glycol
<b>CAS Number:</b>	122-99-6, 112-27-6
<b>Appearance:</b>	Colourless liquid
<b>Odour:</b>	Faint
<b>Density:</b>	1.1 g/cm <sup>3</sup> (Approx)
<b>Melting Point:</b>	5°C
<b>Flash Point:</b>	121°C

NOVAGUARD PEG is a combination of Phenoxyethanol Triethylene glycol. Phenoxyethanol is a versatile, widely used preservative for personal care formulations.

NOVAGUARD PEG is a paraben free, thiazolinone free and formaldehyde free ready to use preservative blend. Triethylene glycol is used as an adjuvant to increase the effectiveness of active ingredients, reduce surface activity, make products easier to apply or to allow several actives to be mixed into a single solution. Tests have shown that Phenoxyethanol in combination with triethylene glycol demonstrated a significant increase in antimicrobial activity compared to phenoxyethanol alone.

NOVAGUARD PEG is effective at 0.2% to 1.0% in many formulation types.

NOVAGUARD PEG is soluble in water at >2.4% - significantly higher than the typical use concentrations. Gentle warming (40°C) may be required to speed dissolution in formulations with high water contents.

#### Application:

NOVAGUARD PEG is permitted for use in personal care formulation in the US, Europe (up to a maximum of 1.1%) and Japan (up to a maximum of 3.3%).

Customers are advised to evaluate NOVAGUARD PEG in their formulations, ideally over a range of concentrations, using antimicrobial efficacy tests to determine the minimum effective concentration to protect.

#### Storage and Handling:

Store in plastic, or plastic lined, tightly closed containers at between 5 and 40°C. Do not store close to strong oxidising agents, which could aggravate any fire situation. Use in a well ventilated area.

#### Packing:

25Kg Carboys / 200Kg Drums.

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing intellectual property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale.