

Product Description:

- **INCI Name:** Propane-1,2-diol
- **CAS No:** 57-55-6
- **Physical Properties:** Colourless, Odorless Liquid
- **Country of Origin:** China
- **Certifications:** USP, Kosher
- **Bulk Packaging:** 215kg drum *4 = 860kg/pallet, 1000kg tote

Formulation Guidelines for Propylene Glycol

Propylene glycol is a versatile ingredient commonly used in cosmetic and personal care formulations for its properties as a humectant, solvent, and emollient. When using propylene glycol in formulations, here are some guidelines to consider:

1. **Concentration:** The recommended usage level of propylene glycol can vary depending on the desired product and its intended use. Typically, propylene glycol is used at concentrations ranging from 1% to 20% in formulations.
2. **Humectant and Moisturizing Properties:** Propylene glycol is an effective humectant, attracting and retaining moisture in the skin. It helps to hydrate and soften the skin, providing a moisturizing effect. Incorporate propylene glycol into formulations such as creams, lotions, serums, and toners to enhance their moisturizing properties.
3. **Solvent and Stability:** Propylene glycol is a good solvent that can help dissolve and disperse other ingredients in formulations. It can improve the solubility of various active ingredients, pigments, and fragrances. Additionally, propylene glycol can contribute to the stability of formulations by preventing ingredient separation and enhancing product homogeneity.
4. **Texture and Sensory Attributes:** Propylene glycol has a smooth and silky texture that can enhance the sensory experience of formulations. It imparts a pleasant feel and spreadability to products, improving their application and absorption. Consider the sensory attributes you want to achieve in your formulation, such as smoothness, glide, and non-greasy finish, when using propylene glycol.
5. **Compatibility:** Propylene glycol is generally compatible with a wide range of cosmetic ingredients, including water-soluble and oil-soluble compounds. It is compatible with various surfactants, emollients, and active ingredients.
6. **Regulatory Considerations:** Ensure compliance with applicable regulations and guidelines for the use of propylene glycol in your specific region and industry. Familiarize yourself with relevant regulations, labeling requirements, and any restrictions or limitations on its usage.
7. **Testing and Quality Control:** Before scaling up production or launching a product containing propylene glycol, conduct stability testing and quality control checks to ensure the performance, stability, and safety of your formulation such as: viscosity measurements, stability tests under different conditions (temperature, pH), and microbial contamination tests.

