MANTA

Technical Data Sheet

Version: 1.0

Manta G700-P3 Silicone Elastomer Gel

Description

Manta G700-P3 is a translucent silicone elastomer paste, comprised of a high molecular weight Dimethicone/Vinyl Dimethicone Crosspolymer swollen in a volatile Cyclopentasiloxane carrier.

Unlike simple silicone fluids, Manta G700-P3 functions as a stable dispersion of a 3D cross-linked network. Upon application, the volatile carrier evaporates, depositing the elastomer powder on the skin. This mechanism creates a unique powdery-velvet texture and a dry, matte finish. It acts as a highly effective rheology modifier and sensory enhancer, offering a cost-efficient solution for achieving premium textures.

Typical Physical Properties

INCI/CTFA	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer
Appearance	Transparent to translucent paste
Non-volatile content(%)	≥ 14
Viscosity (mPa·s, S94, 2.5RPM, 25°C)	250000-580000

Features

- Features a stable silicone elastomer gel structure;
- Imparts a velvety, silky-smooth skin feel;
- Provides mild sebum absorption for effective oil control;
- Can be cold-processed at room temperature to thicken the oil phase;
- Effectively reduces the tackiness of cosmetic formulations;
- Enhances the sensory profile of volatile cyclic silicones.

Applications

Manta G700-P3 is suitable for a wide range of cosmetic formulations, including:

1. Sun Care: Sunscreen lotions and creams;
2. Color Cosmetics: Liquid foundations and makeup primers;
3. Hair Care: Smoothing serums and styling products;
4. Formulation Compatibility: Readily incorporated into Water/Oil (W/O), Water/Silicone (W/Si), and Oil/Water (O/W) emulsions, as well as completely anhydrous products.

How to use

Dispersion: Can be directly dispersed into the oil phase. Blending it with dimethicone, cyclomethicone, phenyl trimethicone, fatty acid esters, or hydrocarbons will effectively reduce its

initial viscosity. Stir until uniform; no subsequent high-shear mixing is required.
Emulsification: For emulsion formulations, it is recommended to homogenize the oil phase separately prior to emulsification, or slowly add the dispersed oil phase into the batch under continuous stirring. It can also be post-added to the emulsion if the viscosity of the system is sufficient to keep it evenly suspended.
Temperature Control: Any heating operations must be performed in a closed vessel to prevent the volatilization of the cyclopentasiloxane carrier. Processing temperatures should not exceed 60°C.
Recommended Dosage: 1.0% - 20.0% of the total formulation, depending on the desired viscosity and sensory profile.

Packing

In 18kg pail

Safety and Storage

Keep away from heat and open flame. Prevent from the exposure of moisture, acid, alkalis and other impurities. When stored in the original unopened containers, this product has a usable life of 24 months from the date of production.

Contact Information

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