MANTA

Technical Data Sheet

Version: 1.0

Manta G701A Silicone Elastomer Gel

Description

Manta G701A is a sophisticated composite silicone elastomer blend. It features a cross-linked Dimethicone/Vinyl Dimethicone Crosspolymer swollen in a balanced dual-carrier system consisting of volatile Cyclopentasiloxane and low-viscosity Dimethicone.

This hybrid architecture bridges the gap between ultra-matte volatile gels and rich non-volatile pastes. Manta G701A functions as a rheology modifier that exists as a stable dispersion (swollen gel particles) rather than a solution. Upon application, the volatile component aids spreading and then evaporates, while the Dimethicone component remains to provide a lingering, plush smoothness. It delivers a satin-matte finish that feels moisturized yet powdery.

Typical Physical Properties

INCI/CTFA	Cyclopentasiloxane (and) Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer
Appearance	Transparent to translucent paste
Non-volatile content(%)	≥ 25
Viscosity (mPa·s, S94, 2.5RPM, 25°C)	50000-200000

Properties

1. Imparts a velvety, silky-smooth skin feel;
2. Provides mild sebum absorption for a matte finish;
3. Can be processed at room temperature to thicken the oil phase;
4. Effectively reduces the tackiness of cosmetic formulations;
5. Enhances the sensory benefits of low-viscosity silicone oils.

Applications

Manta G701A can be widely used in a variety of personal care formulations, including:

1. Skin Care: Facial creams, serums, and moisturizing lotions;
2. Sun Care: Sunscreens and after-sun products;
3. Color Cosmetics: Liquid foundations, makeup primers, and bases;
4. Hair Care: Smoothing serums and styling products.

How to use

Dispersion: Can be directly dispersed into the oil phase (such as dimethicone, cyclomethicone, phenyl trimethicone, fatty acid esters, or hydrocarbons to reduce 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 sealed vessel to prevent the volatilization of the cyclopentasiloxane carrier. The processing temperature 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

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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