MANTA

Technical Data Sheet

Version: 1.0

Manta G703B Silicone Elastomer Gel

Description

Manta G703B is a specialized non-volatile silicone elastomer paste, engineered for robust formulation environments. It consists of a thermally resistant Dimethicone/Vinyl Dimethicone Crosspolymer network dispersed in a low-viscosity Dimethicone fluid.

Distinguished by its exceptional thermal stability, Manta G703B maintains its rheological integrity and sensory properties even when subjected to hot dispensing processes or elevated processing temperatures. Unlike volatile gels that may shrink or alter texture under heat, this product creates a stable, substantive matrix. It delivers a persistent, moisturizing shield on the skin, characterized by a smooth, non-tacky, and lubricious after-feel that resists evaporation.

Typical Physical Properties

INCI/CTFA	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer
Chemical Name:	Thermally Stable Silicone Elastomer Blend
Appearance	Colorless to slightly yellow transparent to translucent paste
Non-volatile content(%)	>70
Viscosity (mPa·s, S94, 2.5RPM, 25°C)	250,000-580,000

Features

1. Highly compatible with a wide variety of cosmetic formulations;
2. Utilizes low-viscosity dimethicone as a non-volatile, stable carrier;
3. Acts as an excellent thickening agent in Water-in-Oil (W/O) systems;
4. Imparts a uniquely silky, smooth, and powdery skin feel;
5. Provides a long-lasting sensory profile and durable moisturizing barrier;
6. Highly versatile: Suitable for both hot and cold processing operations.

Applications

Manta G703B can be widely used in personal care products, including:

1. Skin Care: Facial creams, moisturizing lotions, and anti-aging serums;
2. Sun Care: Sunscreen creams and after-sun lotions (improves spreadability);
3. Color Cosmetics: Liquid foundations, makeup primers, and BB/CC creams (provides a smooth, matte canvas);
4. Body Care: Silky body butters and massage gels.

How to Use

Processing: For emulsions (creams/lotions), add directly to the oil phase and heat if necessary.

High-shear mixing or homogenization is strongly recommended to ensure complete and uniform dispersion.
Post-Addition: Can also be post-added to pre-formed emulsions, provided adequate high-shear mixing is applied to ensure even distribution.
Recommended Dosage: 1.0% – 30.0% 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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