MANTA

Technical Data Sheet

Version: 1.0

Manta F1047 Compound Silicone Fluid

Description

Manta F1047 is a proprietary blend of high molecular weight Dimethiconol gum dispersed in a volatile cyclic silicone carrier (Cyclotetrasiloxane and Cyclopentasiloxane).

This optimized delivery system provides the conditioning benefits of silicone gum—such as substantivity and film-forming—without the handling difficulties associated with high-viscosity fluids. Upon application, the volatile cyclics evaporate, leaving behind a durable, non-occlusive film that imparts a luxurious, velvety texture to skin and hair.

Typical Physical Properties

INCI/CTFA	Cyclotetrasiloxane (and) Cyclopentasiloxane (and) Dimethiconol
Composition A	Cyclotetrasiloxane (and) Cyclopentasiloxane
Composition B	Dimethiconol
Appearance	Transparent viscous liquid
Viscosity mPa.s	6000
Specific Gravity (25°C, g/cm3)	0.96
Refractive index (25°C, ηD25)	1.397

Features:

1. Delivers exceptional substantivity and long-lasting, persistent conditioning properties on skin and hair.
2. Imparts a unique, luxurious, and velvety-soft skin feel without tackiness or heavy residue.
3. Provides excellent optical clarity and significantly enhances the wash-off resistance of cosmetic films.
4. Offers improved spreadability and ease of handling compared to pure, unblended high-molecular-weight silicone gums.

Applications

Manta F1047 can be widely used in:

1. Cosmetics & Skin Care: Creams, lotions, and color cosmetics (provides a smooth, durable canvas).
2. Sun Care: Sunscreens and after-sun products (improves UV filter distribution and water resistance).
3. Hair Care: Hair conditioning serums and split-end repair fluids (delivers high gloss and smoothness).
4. Industrial Applications: Utilized as a premium performance additive in textiles and specialty coatings to enhance surface slip and abrasion resistance.

How to Use

1. Temperature Control: Due to the high volatility of the D4/D5 carrier system, all processing should be conducted at room temperature or strictly below 50°C to prevent solvent loss.
2. Processing: Add slowly to the oil phase of the formulation under continuous stirring until completely homogeneous. For emulsions, add during the cool-down phase.
3. Recommended Dosage: 2.0% - 10.0% in standard cosmetic formulations, depending on the desired sensory profile and film-forming requirements.

Packing

In pails, drums

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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