MANTA

Technical Data Sheet

Version: 1.0

Manta F1006(1.5cSt)

Low Viscosity Dimethyl Silicone Fluid

Description

Manta F1006 (1.5 cSt) is a short-chain, linear polydimethylsiloxane (Decamethyltetrasiloxane) engineered as a high-performance volatile delivery system. It is characterized by its high spreading coefficient and ability to significantly reduce the surface tension of organic oils and pigments.

Unlike heavier silicones, Manta F1006 functions as a transient fluid: it facilitates the effortless, uniform application of active ingredients and then evaporates at a controlled, moderate rate, leaving the skin with a uniquely dry, silky, and premium finish. Crucially, it serves as a linear alternative to volatile cyclic silicones (such as D5) for modern personal care formulations.

Typical Physical Properties

INCI/CTFA	Dimethicone
Chemical Name:	Decamethyltetrasiloxane
CAS NO.:	141-62-8
Appearance	Colorless transparent fluid
Refractive index (25°C)	1.385-1.395
Specific gravity (25°C)	0.83-0.87
Viscosity (cSt, 25°C)	1.4-1.6
Flash Point(°C)	63

Features

1. Functions as a linear alternative to D5 (Cyclopentasiloxane) with a highly similar moderate evaporation profile.
2. Delivers outstanding spreadability and a luxurious, silky-smooth tactile feel.
3. Acts as a premium cosmetic solvent and transient carrier for active ingredients.
4. Highly compatible and miscible with a diverse array of organic and silicone-based cosmetic ingredients.
5. Completely non-greasy and non-occlusive (allows the skin to breathe naturally).
6. Leaves absolutely no oily residue, tackiness, or polymeric build-up on the skin or hair.

Applications

Manta F1006 (1.5 cSt) is an ideal volatile carrier for Cyclic-Free personal care formulations, including:

1. Personal Care: Antiperspirants, roll-on deodorants, and body sprays.

2. Skin Care: Lightweight facial serums, quick-dry moisturizers, and cleansing lotions.
3. Color Cosmetics: Liquid foundations, makeup primers, and smooth-glide color formulas.
4. Hair Care: Leave-in hair treatments and lightweight conditioning sprays.

How to Use

1. Processing: Highly versatile; can be used alone as a primary transient carrier or blended seamlessly with other liquid cosmetic raw materials.
2. Compatibility: Demonstrates excellent miscibility with absolute ethanol, natural lipids, and common organic cosmetic solvents.
3. Sensory Optimization: Features a low heat of vaporization, meaning its evaporation does not aggressively draw heat from the skin. It will not cause an intense or uncomfortable cooling/stinging sensation compared to alcohol or lighter volatile carriers.
4. Recommended Dosage: Highly variable depending on the application; can be used from 1.0% up to 80.0% as a base vehicle.

Packing

In 18kg plastic pail; 150kg iron drum; IBC

Safety and Storage

Flammable liquid. Transported as dangerous goods: UN1993, Class 3, Packing Group III (see SDS). Keep away from heat, sparks 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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