MANTA

Technical Data Sheet

Version: 1.0

Manta F1006(2cSt)

Low Viscosity Dimethyl Silicone Fluid

Description

Manta F1006 (2 cSt) represents a low-viscosity, linear siloxane engineered for controlled volatility. Distinct from heavier silicone fluids, it functions as a highly efficient transient delivery vehicle. This property allows it to distribute active ingredients and pigments uniformly across the skin before evaporating completely, ensuring a finish that is strictly dry-touch and tack-free.

As the global personal care industry shifts away from cyclic silicones, Manta F1006 (2 cSt) serves as a functional linear alternative to Cyclomethicone (D5). It closely matches the weightless sensory profile and moderate drying curve of D5 as a linear, non-cyclic fluid. The fluid is chemically inert and exceptionally mild, imparting a soft, velveteen texture to formulations without leaving any oily residue.

Typical Physical Properties

INCI/CTFA	Dimethicone
Chemical Name:	Dodecamethylpentasiloxane
CAS NO.:	141-63-9
Appearance:	Colorless transparent fluid
Refractive index (25°C) :	1.390-1.410
Specific gravity (25°C) :	0.85-0.89
Viscosity (cSt, 25°C) :	1.8-2.2
Flash Point(Closed Cup, °C) :	80

Features

1. Functions as a linear alternative to D5 (Cyclopentasiloxane) with a highly comparable evaporation profile.
2. Delivers exceptional spreadability, optimal "play time" during application, and a luxurious silky touch.
3. Acts as a premium cosmetic solvent, transient carrier, and efficient spreading agent.
4. Highly compatible and miscible with a diverse array of organic and silicone-based cosmetic ingredients.
5. Completely non-greasy and non-occlusive.
6. Leaves absolutely no oily residue, tackiness, or polymeric build-up upon evaporation.

Applications

Manta F1006 (2 cSt) is highly versatile across both cosmetic and technical sectors:

1. Personal Care & Cosmetics

- Skin Care Formulations: Acts as a highly effective anti-soaping agent, eliminating the "whitening" (white rub-out) effect often seen in O/W emulsions. Its transient nature ensures a dry, non-greasy finish.
- Hair Care Solutions: Significantly enhances wet-combability and detangling in conditioners. Unlike heavier oils, it delivers high gloss and smoothness without sacrificing natural hair volume or weighing hair down.
- Antiperspirants & Aerosols: Serves as a non-clogging carrier vehicle for active aluminum salts. It optimizes spray patterns and dries cleanly upon contact, maximizing user comfort.
- Color Cosmetics: Facilitates the uniform dispersion of pigments in liquid foundations and primers, ensuring smooth application, excellent slip, and consistent color payoff.

2. Industrial & Technical Applications

- Heat Transfer Media: Ideal for ultra-low temperature cryostats and thermal management systems, maintaining fluidity and stability even at extreme sub-zero temperatures.
- Precision Damping: Provides highly stable viscous damping in sensitive gauges and instruments, remaining largely unaffected by environmental temperature fluctuations.
- Precision Cleaning: Functions as a residue-free solvent for delicate optics and electronics; it effectively solvates contaminants and evaporates cleanly.
- Coating Additive: Acts as a high-performance flow and leveling agent to eliminate surface defects (such as cratering and pinholes) in premium paints and inks.

How to Use

1. Processing: 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 Benefit: Manta F1006 (2 cSt) features a low heat of vaporization. Compared to lighter volatile carriers (like alcohol), it will not draw excessive heat from the skin during evaporation, preventing any uncomfortable cooling or stinging sensations.

Packing

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

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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