MANTA

Technical Data Sheet

Version: 1.0

Manta F1049 Cyclic Silicone Fluid

Description

Manta F1049 is a volatile polydimethylcyclosiloxane fluid consisting primarily of Cyclohexasiloxane (D6).

Distinct from lighter cyclic silicones (like D5), Manta F1049 exhibits a slower evaporation rate and slightly higher viscosity. This unique volatility profile provides extended working time, allowing formulations to be spread and massaged into the skin for a longer duration before evaporating. It functions as a premium carrier fluid that delivers a substantial, silky lubricity without the cooling sensation often associated with faster-drying volatile solvents.

Typical Physical Properties

INCI/CTFA	Cyclohexasiloxane
Chemical Name:	Dodecamethylcyclohexasiloxane (Cyclic Volatile Silicone - D6)
CAS NO.:	540-97-6
Appearance	Colorless transparent fluid
Refractive index (25°C)	1.3900-1.4050
Specific gravity (25°C)	0.950-0.970
Viscosity (cSt, 25°C)	4.0-8.0

Properties

1. Composed of high-purity cyclosiloxane featuring a tailored, moderate volatility profile.
2. Physiologically inert and suitable for topical cosmetic applications.
3. Exhibits outstanding compatibility and miscibility with a wide range of organic cosmetic solvents and esters.
4. Imparts a dry, non-greasy sensory feel while providing excellent conditioning properties.
5. Ensures effortless spreadability and provides an extended working time for formulation application and blending.

Applications

Manta F1049 can be used in a variety of personal care products, including:

1. Skin Care: Facial creams, massage creams, and body lotions (provides extended massage time without dragging).
2. Sun Care: Sunscreens and after-sun products (improves the even distribution of active UV filters).
3. Color Cosmetics: Liquid foundations and concealers (ensures seamless blending and a smooth finish without drying too quickly).
4. Personal Care & Hair Care: Antiperspirants, deodorants, and hair conditioning serums.

How to use

1. Processing: Can be used directly as a primary carrier, co-solvent, or sensory additive.
2. Emulsification: When formulating aqueous systems (O/W or W/O emulsions), Manta F1049 should be incorporated into the oil phase prior to emulsification.
3. Recommended Dosage: 1.0% - 20.0% of the total formulation, depending on the desired spreadability and evaporation rate.

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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