MANTA

Technical Data Sheet

Version: 1.0

Manta F1048 Cyclic Silicone Fluid

Description

Manta F1048 is a volatile carrier fluid composed of Cyclopentasiloxane (D5) and Cyclohexasiloxane (D6).

Unlike lighter volatile blends, Manta F1048 is engineered to provide an extended evaporation profile. The inclusion of the larger Cyclohexasiloxane molecule slows down the volatilization process, granting the formulation a longer working time. This allows for extended spreading and massaging of creams and oils before the product dries down. It delivers a substantive, silky-soft skin feel that is richer than pure D5 but without the greasiness or occlusion of non-volatile dimethicones.

Typical Physical Properties

INCI/CTFA	Cyclopentasiloxane (and) Cyclohexasiloxane
Chemical Name:	Volatile Polysiloxane Blend (D5/D6)
CAS NO.:	541-02-6 & 540-97-6
Appearance	Colorless transparent fluid
Refractive index (25°C)	1.3900-1.4050
Specific gravity (25°C)	0.950-0.960
Viscosity (cSt, 25°C)	3.0-8.0

Properties

1. Composed of a highly refined cyclosiloxane blend (D5/D6) featuring a tailored, extended evaporation 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 "play time" for formulation application and blending.

Applications

Manta F1048 can be used in:

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 F1048 must 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 25kg pail; 180kg 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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