MANTA

Technical Data Sheet

Version: 1.0

Manta F1042A Caprylyl Silicone Fluid

Description

Manta F1042A is an alkyl-modified trisiloxane fluid. Unlike standard polydimethylsiloxanes, Manta F1042A features an octyl functional group that grants it exceptional compatibility with a wide array of organic ingredients, including natural plant oils, esters, and hydrocarbons.

Functioning as a co-solvent and compatibilizer, it effectively bridges the gap between silicone and organic phases in complex formulations. It offers a moderate volatility profile—evaporating at a rate comparable to D6—providing distinct lubricity and a rich, silky skin feel that transitions to a dry, non-greasy finish. It is an ideal solution for reducing the tackiness of heavy organic oils while maintaining formulation stability.

Typical Physical Properties

INCI/CTFA	Caprylyl Methicone
Chemical Name:	Alkyl-Modified Trisiloxane (Caprylyl Trisiloxane)
CAS NO.:	17955-88-3
Appearance	Colorless transparent fluid
Refractive index (25°C)	1.4050-1.4150
Specific gravity (25°C)	0.800-0.900
Viscosity (mPa.s, 25°C)	2.0-4.0

Properties

1. Low-molecular-weight alkyl-modified siloxane structure ensuring superior spreadability.
2. Physiologically inert.
3. Outstanding organic solvent compatibility, making it a powerful co-solvent for esters and vegetable oils.
4. Moderate volatility profile (comparable to D6), providing optimal play time during application.
5. Delivers excellent conditioning properties and a uniquely dry, non-greasy sensory finish.
6. Highly miscible with a diverse range of cosmetic solvents, facilitating stable multi-phase formulations.

Applications

Manta F1042A can be used in personal care products, including:

1. Skin Care: Facial creams, body lotions, and moisturizing serums.
2. Sun Care: Sunscreens and after-sun products (improves the solubility of organic UV filters).
3. Color Cosmetics: Foundations, concealers, lipsticks, and makeup primers.

4. Personal Care: Deodorants, antiperspirants, and hair conditioning treatments.

How to Use

1. Processing: Can be used directly as a primary carrier, a main raw material, or a functional additive to improve organic compatibility.
2. Emulsification: Easily incorporated into both O/W and W/O emulsion systems using standard processing techniques (add directly to the oil phase).
3. Recommended Dosage: 0.5% - 20.0% of the total formulation, depending on the desired sensory profile and compatibility 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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