MANTA

Technical Data Sheet

Version: 1.0

Manta F10412 Lauryl Silicone Fluid

Description

Manta F10412 is a clear, low-viscosity alkyl-modified silicone fluid characterized by its excellent compatibility with a wide range of cosmetic ingredients. By grafting a long-chain lauryl (C12) group onto the siloxane backbone, Manta F10412 possesses a unique organic-compatible structure, allowing it to function as a superior co-solvent and emollient carrier.

Unlike traditional volatile silicones, this fluid achieves its dry sensory profile through exceptional spreadability and rapid absorption rather than evaporation. It provides an optimal "play time" for spreading, leaving behind a light, dry, and non-greasy finish. It is physiologically inert and serves as an ideal vehicle for reducing the tackiness of organic oils and waxes in premium personal care formulations.

Typical Physical Properties

INCI/CTFA	Lauryl Dimethicone
CAS NO.:	139614-44-1
Appearance	Colorless transparent fluid
Refractive index (25°C)	1.4050-1.4250
Specific gravity (25°C)	0.800-0.900
Viscosity (mPa.s, 25°C)	5.5-7.0

Features

Features a low-viscosity, alkyl-modified siloxane structure;
Physiologically inert;
Exhibits outstanding compatibility with a wide variety of organic cosmetic ingredients;
Highly miscible with various cosmetic solvents, acting as an excellent co-solvent;
Provides superior conditioning properties for both skin and hair;
Imparts a light, dry, and distinctly non-greasy sensory feel.

Applications

Manta F10412 can be used in personal care products, including:
Skin Care: Facial creams, moisturizing lotions, and serums (effectively reduces the tackiness of heavy organic oils);
Sun Care: Sunscreens and after-sun products (improves pigment dispersion and spreadability);
Color Cosmetics: Liquid foundations and makeup bases (provides a dry, smooth canvas);
Body Care & Hair Care: Antiperspirants, deodorants, and hair conditioning fluids (adds light conditioning without buildup).

How to Use

Processing: Manta F10412 is highly versatile. It can be used directly as a primary carrier, an active emollient, or a co-solvent. It is readily incorporated into anhydrous systems or added to the oil phase of emulsions (both O/W and W/O) prior to emulsification.

Recommended Dosage: 0.5% - 20.0% of the total formulation, depending on the desired sensory profile and formulation 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

Nanjing Manta New Material Co., Ltd

Add: Room 102-247, Building 17, No. 1 Qiliqiao North Road, Nanjing Area of the China (Jiangsu) Pilot Free Trade Zone, Nanjing, China

Factory: Miaoguan Town Industrial Park, Sishui County, Jining City, Shandong Province, China

Mob: 0086 18962800162

Mail:sales@mantasil.com Web:www.mantasilicone.com