MANTA

Technical Data Sheet

Version: 1.0

Manta F1017 Hair and Skin Care Silicone Fluid

Description

Manta F1017 is a high-performance conditioning fluid composed of ultra-high molecular weight Dimethiconol gum solvated in a non-volatile Dimethicone carrier.

Designed as a superior frizz-control agent, this blend leverages the gum-like rheology of Dimethiconol to coat the hair shaft with a continuous, hydrophobic sheath. Unlike lighter oils that may evaporate or absorb too quickly, Manta F1017 provides a substantive, long-lasting protective barrier. It transforms the texture of rough, damaged hair into a state of pliability and smoothness, while imparting a sophisticated, satin-matte finish to skin care formulations.

Typical Physical Properties

INCI/CTFA	Dimethiconol (and) Dimethicone
Chemical Name:	Silicone Gum Blend in Non-Volatile Carrier
CAS NO.:	70131-67-8 & 63148-62-9
Appearance	Colorless transparent fluid
Refractive index (25°C)	1.3950-1.4050
Specific gravity (g/cm^3, 25°C)	0.920-0.965
Viscosity (cSt, 25°C)	1,200~2,500

Note: These values are not intended for use in preparing specifications.

Properties

1. Forms a complete, uniform, and non-occlusive protective film on the skin and hair surface.
2. Imparts a long-lasting, moist, and silky-smooth sensory profile.
3. Provides exceptional lubricity and reduces surface friction (slip) without clogging pores.
4. Delivers a sophisticated satin-matte finish, effectively masking the greasiness of other ingredients.
5. Exhibits outstanding hydrophobicity, significantly enhancing the water resistance of formulations.

Applications

Manta F1017 is an additive for personal care products, including:

1. Hair Care: Anti-frizz serums, styling aids, and daily conditioners.
2. Skin Care: Moisturizing creams, lotions, and anti-aging formulations.
3. Color Cosmetics: Primers, foundations, and long-wear lip products.
4. Sun Care: Water-resistant sunscreens and after-sun gels.

How to Use

1. Compatibility & Dilution: Highly compatible with oil-soluble cosmetic ingredients such as botanical

oils, lipids, and fragrances. It can be further diluted with cyclic silicone oils (cyclomethicone) in any proportion to adjust application viscosity.

2. Thermal Stability: Manta F1017 is suitable for hot-process formulations. However, it is recommended to maintain the operating temperature below 50°C. If heating is necessary for the oil phase, the total heating time should not exceed 30 minutes to maintain product integrity.

3. Recommended Dosage: 5.0% - 8.0% in skin care creams; 3.0% - 6.0% in hair care products; 40.0% - 50.0% in concentrated hair serums/oils.

Packing

In 200L 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. This product is non-hazardous product.

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