MANTA

Technical Data Sheet

Version: 1.0

Manta F1016A

Hair and Skin Care Silicone Fluid

Description

Manta F1016A consists of ultra-high molecular weight Polydimethylsiloxane (Silicone Gum) dispersed in a synergistic carrier system of volatile Cyclomethicone and low-viscosity Dimethicone. This hybrid carrier design allows for a balanced evaporation profile: the volatile components facilitate excellent spreadability and flash-off, while the low-viscosity fluid ensures residual lubricity. Upon application, Manta F1016A deposits a substantive, hydrophobic film that smooths the hair cuticle and skin surface, delivering a premium velvety texture without the heavy greasiness typically associated with vegetable oils.

Typical Physical Properties

INCI/CTFA	Dimethicone (and) Cyclomethicone		
Chemical Name:	Silicone Gum Blend in Hybrid Carrier		
Product Code	F1016A(5000-6000cSt)	F1016A(6000-7000cSt)	F1016A(10000-12000cSt)
Appearance	Colorless transparent viscous fluid		
Viscosity(25°C)	5000-6000cSt	6000-7000cSt	10000-12000cSt
Refractive index (25°C)	1.396-1.435	1.396-1.435	1.396-1.435
Specific gravity (25°C)	0.920-0.950	0.920-0.950	0.920-0.950

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

Features

1. Imparts a luxurious, velvety, and silky sensory profile to both skin and hair.
2. Provides exceptional gloss and superior light-reflective properties.
3. Forms a soft, breathable, and substantive silicone protective film.
4. Enhances the substantivity and longevity of other active ingredients on the skin.
5. Significantly reduces surface friction (improves slip) while maintaining high water resistance.
6. Exhibits excellent hydrophobicity, effectively protecting hair from humidity and frizz.

Applications

Manta F1016A is an additive for a variety of personal care applications, including:

1. Hair Care: Split-end repair serums, anti-frizz leave-in conditioners, and styling aids.
2. Skin Care: Facial moisturizers, protective barrier creams, and body lotions.
3. Color Cosmetics: Makeup primers, liquid foundations, and long-wear concealers.
4. Sun Care: Water-resistant sunscreens and after-sun formulations.

How to Use

1. Temperature Control: Due to the presence of volatile cyclomethicone, it is highly recommended to process Manta F1016A at room temperature or below 50°C. If the oil phase requires melting, cool the batch to 50°C before adding this product under continuous stirring.
2. Compatibility & Dilution: Exhibits excellent compatibility with oil-phase cosmetic materials such as pigments, natural lipids, and fragrances. It can be further diluted with volatile silicones to reduce viscosity.
3. Direct Application: After adjusting the viscosity with cyclomethicones, the product can be used directly as a high-end hair serum to condition, hydrate, and restore dry or weakened hair, leaving it bright, smooth, and silky.
4. Recommended Dosage: 3.0% - 8.0% in standard hair and skin care products; 40.0% - 50.0% in concentrated hair serums or hair oil formulations.

Packing

In 50kg pail, 195kg iron drum

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

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