MANTA

Technical Data Sheet

Version: 1.0

Manta F1056A Phenyl Silicone Fluid

Description

Manta F1056A is a specialized, low-viscosity Phenyl-Modified Siloxane engineered for high-clarity formulations. Distinguished by its superior solubility in ethanol, it is the preferred choice for transparent systems such as sprays, aerosols, and serums.

This fluid acts as a multifunctional sensory shield. Upon application, it forms a breathable, hydrophobic barrier that repels water while remaining non-occlusive (allowing for natural perspiration). Its unique phenyl structure provides robust antioxidant stability against heat and UV radiation, helping to protect sensitive active ingredients within the formulation. It effectively transforms the texture of tacky organic ingredients into a silky, smooth, and non-tacky finish.

Typical Physical Properties

INCI/CTFA	Phenyl Dimethicone
Chemical Name:	Ethanol-Soluble Methyl Phenyl Polysiloxane
CAS NO.:	63148-52-7
Appearance	Colorless to slightly yellow transparent liquid
Refractive index (25°C)	1.4550-1.4700
Specific gravity (25°C)	1.020-1.030
Viscosity (cSt, 25°C)	50-100

Properties

1. Features a high refractive index, significantly enhancing the optical brilliance and gloss of the final product.
2. Exhibits exceptional UV and oxidative stability, protecting the integrity of the formulation against environmental stressors.
3. Outstanding compatibility with a wide range of organic cosmetic solvents; notably soluble in 95% ethanol.
4. Functions as a non-volatile emollient, providing a luxurious, smooth, and non-greasy skin feel.
5. Imparts excellent water resistance and breathability to the skin and hair surface.
6. Easily emulsified using standard cosmetic processing techniques.

Applications

Manta F1056A is ideal for high-performance personal care products, including:

1. Skin Care: Moisturizing lotions, facial creams, and luxury serums.
2. Sun Care: Sunscreen lotions and sprays (improves UV filter stability and spreadability).
3. Color Cosmetics: Liquid foundations, makeup primers, and high-shine lip products.
4. Personal Care: Shaving creams/lotions, deodorants, and premium hair conditioning treatments.

How to Use

1. Processing: Can be easily emulsified using conventional cosmetic emulsifiers and standard mixing protocols.
2. Compatibility Profile: Highly miscible with ethanol (95%) and mineral oil. It also demonstrates excellent compatibility with isopropyl alcohol, lanolin, paraffin oil, beeswax, and esters such as isopropyl myristate.
3. Recommended Dosage: 0.5% - 5.0% of the total formulation, depending on the desired level of gloss and sensory enhancement.

Packing

In 25L pail, 200L 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.

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