MANTA

Technical Data Sheet

Version: 1.0

Manta F1056 Phenyl Silicone Fluid

Description

Manta F1056 is a phenyl-modified silicone fluid designed to function as a universal compatibilizer and sensory modifier. By substituting specific methyl groups with phenyl rings on the siloxane backbone, this polymer achieves a unique balance of silicone-like slip and organic-like solubility.

Distinguished by its exceptional miscibility with alcohol and cosmetic esters, Manta F1056 solves common formulation challenges. It acts as a coupling agent to stabilize complex oil phases and effectively masks the heavy, tacky feel of organic UV filters and vegetable oils. Due to the high thermal stability of the phenyl bond, it provides enhanced resistance to oxidation and heat, protecting formulations during processing and shelf life.

Typical Physical Properties

INCI/CTFA	Phenyl Dimethicone
Chemical Name:	Methyl Phenyl Polysiloxane (Linear)
CAS NO.:	63148-52-7
Appearance	Colorless to slightly yellow transparent liquid
Refractive index (25°C)	1.4549-1.4626
Specific gravity (25°C)	0.970-0.990
Viscosity (cSt, 25°C)	15-30

Properties

1. Features a high refractive index, significantly enhancing the gloss and brilliance of both the formulation and the treated surface.
2. Exhibits outstanding thermal, oxidative, and UV stability, protecting the integrity of the formulation over its shelf life.
3. Demonstrates excellent compatibility and solubility with a vast array of organic cosmetic solvents and esters.
4. Acts as a premium non-volatile emollient, delivering a highly breathable, smooth, soft, and distinctly non-greasy skin feel.
5. Easily emulsifiable and imparts excellent water resistance to the final cosmetic product.

Applications

Manta F1056 can be widely used in:

1. Skin Care: Facial creams, moisturizing lotions, and shaving creams/lotions.
2. Sun Care: Sunscreen lotions (acts as an excellent compatibilizer to stabilize complex oil phases and organic UV filters).
3. Hair Care: Conditioners, hair serums, and glossing sprays.

4. Color Cosmetics: Liquid foundations, lipsticks, and other makeup formulations requiring enhanced slip and shine.

How to use

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

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 36 months from the date of production.

Contact Information

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