MANTA

Technical Data Sheet

Version: 1.0

Manta A2024 Methyl Propyl MTQ Silicone Resin (Powder Form)

Description

Manta A2024 is an advanced MQ-T Propyl hybrid silicone resin, engineered via a green synthesis process that completely eliminates the use of aromatic solvents (such as Toluene and Xylene).

This innovative material combines the superior anchoring power of standard MQ resin with the film flexibility of Propyl-Silsesquioxane (T-resin). The propyl functional groups act as an internal plasticizer, allowing Manta A2024 to form a highly durable and water-resistant film that is significantly softer and more flexible than traditional MQ resins. It offers improved solubility in organic oils and delivers exceptionally comfortable, long-wear performance without any sensation of tightness, flaking, or cracking on the skin.

Typical Physical Properties

INCI/CTFA	Trimethylsiloxysilicate (and) Polypropylsilsesquioxane
Chemical Name:	MQ-T Propyl Resin Hybrid
CAS NO.:	56275-01-5 & 68988-56-7
Appearance	White Powder
Bulk Density(g/cm^3)	0.45 - 0.75
Volatility(%,150°C×3h)	≤ 2.0

Solubility

Note: These values are not intended for specification purposes.

Solubility in the following solvents (silicone resin: solvent = 1:1 weight ratio)

Xylene	S	Hexamethyldisiloxane(MM)	S
Toluene	S	Cyclosiloxane(D4,D5,D6)	S
Water	I	Low-viscosity silicone oil	S

S: Soluble; I: Insoluble

Features

1. Environmentally friendly, high-purity profile entirely free from aromatic solvents.
2. Functions as a flexible film-former, providing durable, wash-off-resistant, and transfer-proof performance.
3. Eliminates the rigid, tight feeling of standard resins, ensuring superior comfort and a non-cracking finish.
4. Exhibits outstanding compatibility with a diverse array of organic cosmetic solvents, lipids, and UV filters.

5. Delivers a smooth, non-tacky tactile feel while maintaining high structural integrity in formulations.

Applications

Manta A2024 is an ideal high-performance flexible film-former for:

1. Color Cosmetics: Long-wear liquid lipsticks, lip glosses, flexible liquid eyeliners, and transfer-proof foundations.
2. Sun Care: High-SPF, wash-off-resistant sunscreens (stabilizes UV filters without stiffening the skin).
3. Skin Care: Protective barrier creams and long-lasting body lotions.
4. Hair Care: Humidity-resistant styling aids and color-protecting hair serums.

How to Use

1. Premixing: As a solid resin, Manta A2024 must be completely pre-dissolved before use. Excellent solvents include volatile cyclic silicones (Cyclopentasiloxane), low-viscosity dimethicones, or Isododecane.
2. Processing: Disperse the resin powder into the chosen solvent and mix (heating to 60°C - 80°C will significantly accelerate the dissolution process) until a clear, uniform fluid is achieved. Add this premix directly into the oil phase of your formulation.
3. Recommended Dosage: The recommended usage level is 2.0% - 10.0% of the total formulation, depending on the specific application and desired level of film flexibility and wear.

Packing

In 25Kg paper drum, 100Kg drum.

Safety and Storage

This product is a non-hazardous chemical. It should be transported and stored as a general chemical. Avoid exposure to sunlight and rain. When stored in the original unopened containers, this product has a usable life of 24 months from the date of production.

Contact Information

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