MANTA

Technical Data Sheet

Version: 1.0

Manta A203 Silicone Resin Film-forming Agent

Description

Manta A203 is a durable film-forming agent consisting of a specialized silicone resin (MQ resin) seamlessly dispersed in volatile Cyclopentasiloxane (D5).

Engineered for advanced personal care formulations, it forms an exceptionally highly cross-linked, flexible, and breathable 3D film on the skin and hair. As the volatile D5 carrier evaporates, the resin establishes a profound, long-lasting matrix that provides outstanding wash-off resistance, zero-transfer properties, and superior water repellency. It is the absolute material of choice for developing high-performance, long-wear color cosmetics and protective skin care products.

Typical Physical Properties

INCI/CTFA	Trimethylsiloxysilicate (and) Cyclopentasiloxane
Appearance	Colorless transparent to slightly yellow slightly turbid liquid
Refractive index (25°C)	1.4000-1.4070
Specific gravity (25°C)	1.000-1.100
Viscosity (mPa.s, 25°C)	300~500

Features

1. Ultimate Long-Wear & Non-Transfer: Forms a highly durable, rub-resistant film that locks in pigments, making it essential for non-transfer lipsticks and long-lasting foundations.
2. Superior Water & Sebum Resistance: Delivers robust hydrophobic properties, preventing makeup meltdown and maintaining product integrity despite sweat, sebum, or water exposure.
3. Optimized Volatility Profile: The D5 carrier provides excellent spreadability and an optimal evaporation rate, ensuring a smooth application followed by rapid, tack-free film formation.
4. Enhanced Gloss & Smoothness: Imparts a non-greasy, comfortable after-feel with a luminous, glossy finish on both skin and hair substrates.

Applications

Manta A203 is widely incorporated into personal care formulations:

Color Cosmetics: Non-transfer lipsticks, long-wear liquid foundations, eyeliners, and mascaras.

Sun Care & Skin Care: Water-resistant sunscreens, protective barrier creams, and anti-aging lotions.

Hair Care: Frizz-control serums, heat-protection sprays, and hair color-retention products.

How to Use

Due to the moderate volatility of the cyclopentasiloxane carrier, it is highly recommended to incorporate Manta A203 into the formulation at temperatures below 50°C (preferably during the

cool-down phase) to prevent solvent loss.
Recommended Usage Levels: Makeup & Color Cosmetics: 2.0% - 10.0%
Hair Care & Skin Care: 0.5% - 5.0%

Packing

In 18kg

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