MANTA

Technical Data Sheet

Version: 1.0

Manta W330 Water-soluble Silicone Wax

Description

Manta W330 is a water-soluble silicone wax. It chemically grafts hydrophilic polyether chains (PEG) onto a polydimethylsiloxane backbone, resulting in a copolymer that combines the typical slip of silicone with excellent water solubility.

Unlike standard liquid dimethicone copolyols, Manta W330 is supplied as a soft waxy solid (or semi-solid) that melts upon contact with warm water or skin. It functions as a potent non-ionic surfactant and wetting agent, significantly reducing surface tension. It acts as a bridge between hydrophobic and hydrophilic phases, providing excellent compatibility in polar formulations while delivering a breathable, non-tacky humectancy.

Typical Physical Properties

INCI/CTFA	PEG-17 Dimethicone		
Chemical Name:	Silicone Polyether Copolymer (Water-Soluble Wax)		
CAS Number:	68937-54-2		
Product Code	W330	W330A	W330B
Appearance	Milky white semi-solid	Milky white semi-solid	Milky white semi-solid
Relative density (40°C)	1.050~1.090	1.040~1.080	1.050~1.090
Melting point (°C)	33~40	40~46	33~40

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

Properties

- 100% water-soluble silicone wax;
- Exhibits surfactant properties;
- Good compatibility with polar raw materials in cosmetics;
- Excellent foam stability;
- Good wettability, spreadability, softness, and moisturizing properties;
- Excellent gloss durability;
- Acts as an emollient and co-emulsifier.

Applications

Manta W330 can be widely used in personal care products:

1. It is suitable for makeup, skin care, and hair care products, exhibiting excellent compatibility with formulation ingredients;
2. Being completely water-soluble, it significantly improves the wettability and spreadability of

creams, cleansing products, antiperspirants, and deodorants;
3. It can be used in body washes and shampoos to enhance foam volume and stability, soften skin and hair, and reduce the greasy after-feel typical of surfactant-based cleansers;
4. It improves the overall moisturizing properties and softness of the final formulation.

How to use

Personal Care Products	Main Effect	Recommended Usage Level
Skin care cream, Facial cleanser	Improve spreadability; Moisturize and reduce surface viscosity;	1~5%
Sunscreen Products	Smooth and soft; Moisturizing and reducing surface viscosity;	1~5%
Makeup	Uniform Color	1~5%
Anti-odor, Anti-perspirant	Increase efficacy and lubricity; Easy to clean, Reduce pollution;	1~5%
Bath products	Stable foam, Reducing surface stickiness and slipperiness	1~5%

The recommended usage level of the product is 1%-5% (Based on total recipe).

Packing

In pails

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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