MANTA

Technical Data Sheet

Version: 1.0

Manta E1036 Water-in-oil Emulsifier

Description

Manta E1036 is a lipophilic polyether polydimethylsiloxane /Polyether modified polydimethylsiloxane.

It acts as a highly efficient emulsifier with excellent capabilities for both Water-in-Silicone (W/Si) and Water-in-Oil (W/O) systems.

It allows for the formulation of high water content emulsions with a low dosage of emulsifier. The product provides a light, silky, and non-sticky skin feel with superior spreadability and stability. It is particularly suitable for liquid foundations and base makeup products. It has a slight characteristic odor typical of polyethers.

Performance comparable to Shin-Etsu KF-6017 / Dow ES-5612.

Typical Physical Properties

INCI/CTFA	PEG-10 Dimethicone
Appearance	Colorless to slightly yellow transparent to translucent liquid
Refractive index (25°C)	1.4100-1.4300
Specific gravity (25°C)	1.00-1.05
Viscosity (cSt, 25°C)	400~1600

Features

Versatile Emulsification: Excellent ability to emulsify silicone oils and oil esters.

Process Flexibility: Easy to emulsify; supports cold processing (room temperature) if all ingredients are liquid.

Sensory Experience: Delivers a silky, smooth, and non-sticky skin feel.

Efficiency: High emulsifying power allows for stable emulsions even at low dosages.

Applications

Manta E1036 is widely used in personal care formulations, including:

1. Makeup: Liquid foundations, Primers, BB/CC Creams;
2. Skin Care: W/O Creams and Lotions;
3. Sun Care: Sunscreen fluids and milks;

How to use

Process:

Preparation: Mix the oil and emulsifier evenly before adding water.

Emulsification: Slowly pour the water phase into the oil phase while mixing quickly.

Cold Process: If all raw materials are liquid, homogenization is not strictly necessary. A stable

emulsion can be obtained by rapid stirring at room temperature.

Stability Tips:
Electrolytes: Adding 0.5% ~ 2.0% sodium chloride (NaCl) to the water phase is essential to improve the storage stability of the emulsion system.
Viscosity Control: Increasing the proportion of the water phase (internal phase) will increase the viscosity of the final system.
Stirring: Increasing the stirring speed generally improves the stability of the emulsion.

Recommended Dosage:
As Main Emulsifier: 1.0% – 4.0%; As Co-emulsifier: 0.1% – 1.5%;

Packing

In 16KG pail

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