MANTA

Technical Data Sheet

Version: 1.0

Manta MS4000H

Silyl-Terminated Polyether

Description

Manta MS4000H is a silyl-terminated polyether (STPE) with moisture-reactive silyl functional groups, used as a base polymer for moisture-curing sealants, adhesives and coatings. It is designed to provide a balance of long-term durability, reactivity and storage stability.
Performance similar to Kaneka SAX400.

Typical Physical Properties

Manta Code:	MS4000H
Chemical Name:	Silyl-terminated polyether (STPE)
Appearance:	Light yellow viscous liquid
Viscosity (25 °C):	15,000 – 30,000 mPa·s
Density (25 °C):	1.002 – 1.005 g/cm³
Flash Point:	> 100 °C
Water Solubility:	Practically insoluble
Tack-Free Time:	30 min
Tensile Strength:	≥ 0.4 MPa
Elongation at Break:	≥ 100 %
Hardness (Shore A):	≥ 20
pH Value:	6.0 – 9.0
Activity:	Low-medium
Modulus:	Medium

Properties

■ Medium modulus: suitable for sealants and adhesives that require medium hardness.
■ Tack-free time: approx. 30 min (see Typical Physical Properties).
■ Storage stability: good storage stability of the polymer and formulated products.

Applications

Manta MS4000H is a base polymer for:

• Industrial sealants and adhesives
• Transportation adhesives and sealants
• Construction adhesives
• Product assembly adhesives

Processing

The silane end groups of Manta MS4000H hydrolyze on contact with water or atmospheric moisture, releasing methanol, and condense to form a siloxane network. Store and process the polymer with moisture excluded.
Dry fillers and pigments before use. Vinyltrimethoxysilane (VTMO) is commonly used as a water scavenger to improve the storage stability of the formulated product.
Fillers, plasticizers, catalysts and additives commonly used in silane-terminated polymer formulations can be used; their type and level should be confirmed by testing in the specific formulation.

Packing

50 kg plastic drum with aluminum-foil liner bag;
200 kg drum with aluminum-foil liner bag;
1,000 kg IBC (tote);
Other pack sizes available on request.

Safety and Storage

Store in the tightly closed original container in a cool, dry place, protected from moisture and direct sunlight. Shelf life: 12 months from the date of production when stored as recommended. The product is classified as non-hazardous. Refer to the current Safety Data Sheet (SDS) for safety, handling and transport information.

Note: The values in this data sheet are typical values and are not intended for use in preparing specifications. Users should test the product to determine its suitability for their specific application.

Contact Information

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