MANTA

Technical Data Sheet

Version: 1.0

Manta MS7500

Silyl-Terminated Polyether

Description

Manta MS7500 is a silyl-terminated polyether (STPE) with moisture-reactive silyl functional groups, designed as a binder for semi-structural adhesives and high-strength sealants. It is designed to combine high modulus with high tensile strength and elongation in cured formulations.
MS7500 can be processed by hot or cold compounding. It retains its mechanical properties over a wide temperature range and offers good reactivity and long-term storage stability. Formulations based on MS7500 can be solvent-free and isocyanate-free.
Performance similar to Kaneka SAX750.

Typical Physical Properties

Manta Code:	MS7500
Chemical Name:	Silyl-terminated polyether (STPE)
Appearance:	Light yellow viscous liquid
Viscosity (25 °C):	40,000 – 60,000 mPa·s
Density (25 °C):	1.002 – 1.005 g/cm³
Flash Point:	> 100 °C
Water Solubility:	Practically insoluble
pH Value:	6.0 – 9.0
Modulus:	High

Properties

■ High modulus and hardness: suitable for high-modulus sealants and semi-structural adhesives requiring high Shore A hardness.
■ Curing: designed for a short tack-free time, allowing quicker handling and shorter production cycles depending on the formulation.

Applications

Manta MS7500 is intended for applications that require load-bearing capacity and elastic recovery, such as:

- Industrial and semi-structural adhesives
- Transportation and automotive
- Infrastructure and waterproofing
- Construction
- Specialty DIY products

Processing

The silane end groups of Manta MS7500 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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