MANTA

Technical Data Sheet

Version: 1.0

Manta MS350

Silyl-terminated polyether (STPE), SMP type

Description

Manta MS350 is a silicone-reinforced, polyether-based silane-terminated polymer for moisture-curing adhesive formulations. It is a clear, low-viscosity, highly reactive polymer that complements elastic adhesive polymers and can be blended with them in different ratios to adjust application properties. It cures with atmospheric moisture to a stable siloxane network and can be formulated with tin-free catalyst systems.
Performance similar to WACKER GENIOSIL® XT 50.
Packaging: 200 kg steel drum only. MS350 is highly reactive, so it is not supplied in IBCs or any other packaging. See Packing.

Typical Physical Properties

Manta Code:	MS350
Chemical Name:	Silicone-modified silane-terminated polyether
Appearance:	Transparent liquid
Viscosity (25 °C):	500 – 1,000 mPa·s
Density (25 °C):	1.13 g/cm³
Activity:	High

Properties

- Easy compounding with conventional additives
- Low viscosity gives broad formulation latitude without solvents or plasticizers
- Tin-free catalyst systems possible
- Fast cure to a tack-free surface
- Adhesion to a wide range of substrates
- Long shelf life of the formulated product

Applications

Wood bonding adhesives.

Processing

Manta MS350 dissolves in common organic solvents and is practically insoluble in water. On exposure to moisture it hydrolyzes readily, releasing methanol, and starts to crosslink.
Moisture must therefore be excluded during storage and processing to prevent premature gelation or an increase in viscosity.
MS350 can be processed with conventional compounding methods and mixing equipment. To adjust the flexibility or modulus of MS350-based formulations, it can be blended with other Manta silane-terminated polymers.
Organometallic catalysts are not required for curing; dioctyltin (DOT) compounds can be used if a specific cure profile or faster reaction is required.

Packing

200 kg steel drum with aluminum-foil liner bag. This is the only packaging for Manta MS350.
No other packaging is available. MS350 is not supplied in 50 kg plastic drums, 1,000 kg IBCs (totes) or any other pack size, and this cannot be changed on request.
Why only the 200 kg steel drum: MS350 is highly reactive. If moisture reaches the product, it hydrolyzes, releases methanol and starts to crosslink. An IBC does not seal as well as a 200 kg steel drum, so moisture can get in more easily during storage and transport. The product would then hydrolyze in the container, and its viscosity could rise or it could gel. The 200 kg steel drum seals better and protects the product from moisture.

Safety and Storage

Store in the tightly closed original 200 kg steel drum in a cool, dry place, protected from moisture and direct sunlight. Shelf life: 16 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.
GENIOSIL® is a registered trademark of Wacker Chemie AG.

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: +86 18961071292
Mail: inquiry@mantasil.com Web: www.mantasil.com