

STP M30

MS Polymer / Silyl-Terminated-Polyether

Description

Manta STP M30 is a silane terminated polyether, which is endcapped by trimethoxysilyl group, the main chain is PPO (polypropylene oxide). It could be applied in moisture curing elastic sealant, elastic structure sealant and sealing coatings. Sealants based on M30 not only have excellent adhesion properties, but also broad to a large range of substrates. This formulation have no solvent and isocyanate, as well as no bubbles and odour generated from curing. It is especially suitable for construction industry, transportation industry and general industry application.

The Equivalent List

Manta	Wacker	Kenaka
M30	/	

Typical Physical Properties

Manta code:	M30
Chemical Name:	Trimethoxysilane Terminated Polyether ; Polyether with gamma isocyanato trimethoxy silane
CAS No.:	216597-12-5
Appearance	Colorless Transparent Liquid
Flash Point (°C):	237
Viscosity (25°C) / mpa·s:	35000 – 55000
Density (25°C) / g/cm ³ :	1.02 – 1.05
Catalyst Dosage (Tin, %)	1 - 2

Chemical Structure:



Properties

- High Active, Fast Curing.
- Good mix with normal additives.

- Good transparency.
- Good yellowish resistance.
- Excellent mechanical properties.
- Widely bond to substrates.

Applications

Transportation industry sealant

Medium, Low modulus construction sealant

Transparent encapsulate adhesive

DIY sealant

Eco-friendly decoration sealant

Processing

Manta M30 polymer dissolves readily in standard organic solvents. It is virtually insoluble in aqueous media, and reacts slowly releasing methanol forming an inert material. Despite its highly reactive terminal groups, uncatalyzed M30 is stable in air for several days. However, its reactivity with water or atmospheric humidity must be taken into account during storage and processing, since the material will slowly start to condensate.

Manta M30 polymer can be formulated by conventional methods and mixing processes. Water scavengers should be added to stabilize the formulations against premature curing during compounding or as a result of exposure to moisture during storage. Particularly suitable is trimethoxysilylmethyl-O-methylcarbamate or vinyltrimethoxysilane.

Guide formulation:

- 30 - 40 parts polymer
- 10 - 20 parts plasticizer (e.g. phthalate, polyether)
- 1 - 2 part water scavenger (e.g. vinyltrimethoxysilane)
- 2 - 5 parts thixotropic agent (e.g. silica)
- 40 - 50 parts fillers (e.g. chalks, titanium dioxide)
- 0.1 - 2 part of antioxidants and UV-stabilizers (e.g. phenols, HALS-stabilizers)
- 1 - 2 part adhesion promoter (organofunctional silanes)

- 0.3 - 0.6 part catalyst (e.g. Dibutyltin dilaurate, DBTDL)

Packaging

In 200L PVF Steel drum

Safety and Storage

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is 24 months. It is non-hazardous substance.

Contact Information

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