MANTA

Technical Data Sheet

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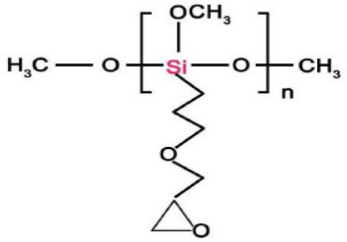
Manta OP200

Low-VOC Epoxy Silane Oligomer

Description

Manta OP200 is an epoxy-functional silane oligomer. Unlike standard monomeric epoxy silanes (such as gamma-glycidoxypropyltrimethoxysilane), OP200 is a pre-condensed polymeric structure. This oligomeric network significantly reduces Volatile Organic Compound (VOC) emissions during curing and improves hydrolytic stability.
It acts as a cross-linking agent and adhesion promoter, designed for universal compatibility across water-borne, solvent-borne, high-solids, and solvent-free formulation systems.
Performance equivalent to Momentive CoatOSil MP 200.

Typical Physical Properties

Manta Code.	OP200
Chemical Name	Epoxy Silane Oligomer
Appearance	Colorless Transparent Liquid
Viscosity (mPa·s)	40-100
Density (25°C, g/cm³)	1.130 - 1.170
Refractive Index (n25/D)	1.4450-1.4650
Flash Point (Closed Cup)	> 100°C
Chemical Structure	

Features

1. Low-VOC Profile: As an oligomer, it contains significantly fewer hydrolyzable alkoxy groups than standard monomers, minimizing alcohol emissions during processing and curing.
2. Universal Compatibility: Designed to be highly effective in Water-Borne (WB), Solvent-Borne (SB), High-Solids (HS), and completely solvent-free resin systems.
3. Enhanced Durability: The pre-formed siloxane network promotes very dense cross-linking, significantly enhancing the wet scrub resistance, chemical resistance, and anti-corrosion properties of cured films.
4. Superior Stability: Exhibits excellent storage stability and lower sensitivity to premature moisture hydrolysis in formulated systems compared to traditional silane monomers.

Applications

Manta OP200 is used as an additive in surface treatments and protective materials:
1. Advanced Coatings: Functions as a robust cross-linking agent and adhesion promoter in industrial coatings, automotive finishes, and architectural paints.
2. Adhesives & Sealants: Used to modify and reinforce structural adhesives and sealants, providing superior cohesive strength and wet adhesion to glass, metals, and plastics.
3. Resin Modification: Highly effective for the modification and upgrading of epoxy, polyurethane, and acrylic resin systems to meet stringent environmental and performance standards.
4. Marine and Heavy-Duty Protective Coatings: Acts as a low-VOC crosslinker and adhesion

promoter specifically formulated for advanced anti-corrosion coating systems designed to withstand extreme, harsh marine and industrial environments.

Packaging

In 200kg drum and 1000kg IBC.

Safety and Storage

Keep away from heat and open flame. When stored at or below 25 °C in the original unopened containers, this product has a usable life of 12 months from the date of production.

Contact Information

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