MANTA

Technical Data Sheet

Version: 1.0

Manta MS692

Silane-Modified Polyether Binder for Mineral Substrate Protection

Description

Manta MS692 is a low-viscosity, moisture-curing silane-modified polyether (SMP) binder designed for tin-free catalysis. The polymer crosslinks by hydrolysis and condensation of its terminal alkoxysilane groups on exposure to ambient moisture. Cure rate and rheology of the final formulation are adjusted with aminosilane catalysts; no organotin catalyst is required. Performance equivalent to WACKER SILRES® BS 6920.

Typical Physical Properties

Manta Code:	MS692
Chemical Name:	Silane-modified polyether
Appearance:	Clear to pale yellow liquid
Viscosity (25 °C):	approx. 150 mPa·s
Density (25 °C):	1.13 g/cm³
Active Content:	100 % (solvent- and plasticizer-free)

Properties

■ Catalysis: designed for tin-free amine catalysis, supporting formulations that must comply with restrictions on organotin compounds.
■ Cured film: forms a crosslinked, hydrophobic siloxane network in the substrate pores or as a surface film, providing resistance to water ingress and oily stains.
■ No solvents or plasticizers: the base binder contains no volatile organic solvents or low-molecular-weight plasticizers, which limits shrinkage during curing.
■ Processability: the low viscosity (approx. 150 mPa·s) allows fast wetting of fillers and pigments and good penetration into porous mineral substrates.

Applications

Manta MS692 is used as the main binder in formulations for protecting mineral surfaces:

• Penetrating impregnation: formulated with suitable aminosilanes for stain-resistant treatment of highly porous substrates (e.g., paving stones, clinker, masonry, natural stone).

• Thin-film coatings: clear or pigmented topcoats (typically < 100 µm wet film thickness) for polished and unpolished industrial concrete floors.

• Application methods: short-pile roller, brush, mop or airless spray equipment.

Processing

• Compounding sequence: MS692 can be processed in planetary mixers or high-speed dissolvers. Disperse rheological additives, matting agents or pigments in the binder first.

• Catalyst addition: add the aminosilane catalyst as the last component.

• Moisture control: after catalyst addition the system reacts quickly with atmospheric moisture. Minimize exposure to air, blanket the mixing vessel with a dry inert gas (e.g., nitrogen) and fill immediately into tightly sealed containers to prevent premature crosslinking.

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.

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