

# Manta WS290

Concentrated Silane/Polysiloxane Water Repellent

## Description

Manta WS290 is a solvent-free, 100% active concentrate composed of silanes and highly modified polysiloxanes. It is engineered to be diluted with organic solvents, functioning as an exceptional water-repellent impregnator and primer for mineral substrates.

Equivalent to: Wacker SILRES® BS 290

## Typical Physical Properties

|  |                                    |
|--|------------------------------------|
| Manta code:                                | WS290                              |
| Chemical Name:                             | Silanes and modified polysiloxanes |
| Appearance:                                | Light yellow liquid                |
| Active Content(%)                          | 100                                |
| Specific Gravity(20°C, g/cm <sup>3</sup> ) | 0.97                               |

## Properties

- Exceptional Hydrophobicity: Delivers outstanding initial and long-term water repellency.
- Highly Breathable: Maintains uncompromised water vapor permeability, allowing the substrate to "breathe".
- Pronounced Beading Effect: Imparts an excellent surface water-droplet roll-off (lotus) effect.
- Deep Penetration: Low molecular weight enables high penetrating power into dense mineral matrices.
- Aesthetic Preservation: Significantly reduces dirt pick-up (stain resistance) and effectively prevents surface efflorescence.

## Application

Manta WS290 is an ideal high-concentration base for the production of solvent-borne penetrating water repellents and primers. It is highly suitable for:

1. Clay bricks, sand-lime bricks, and natural stone.
2. Exposed concrete and mineral-based plasters/renders.
3. Functioning as a high-performance hydrophobic primer for exterior acrylic or silicone resin paints.

## Application Guidelines

- Dilution Requirement: Due to its 100% active concentration, WS290 must be diluted prior to application. Depending on the substrate's porosity, dilute at a ratio of 1:9 to 1:14 by weight.
- Suitable Solvents: Highly miscible with aliphatic or aromatic hydrocarbon solvents, as well as dearomatized isoparaffins (e.g., D40).
- Application Technique: Apply the diluted solution liberally and evenly to the absorbent surface

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using a brush, roller, or the flooding method. A wet-on-wet application is recommended for maximum penetration.

- Substrate Tolerance: Uniquely formulated to perform effectively even on slightly damp or highly alkaline building materials.

### Packaging

In 190kg drum and 900kg IBC

### Safety and Storage

**Storage Conditions:** Store in a cool, dry, and well-ventilated area away from direct sunlight, heat sources, and open flames. Unlike aqueous emulsions, this 100% active concentrate is highly frost-resistant but exceptionally sensitive to humidity.

**Moisture Sensitivity (CRITICAL):** This product reacts actively with atmospheric moisture to release small amounts of alcohol (ethanol/methanol). Prolonged exposure to air will cause premature cross-linking and irreversible damage. Ensure all containers are tightly sealed immediately after dispensing.

**Hazard & Handling:** The final diluted solutions (when mixed with hydrocarbon solvents) are highly flammable. Keep away from ignition sources and ensure adequate ventilation during application.

**Shelf Life:** 12 months when stored safely in original, unopened containers under recommended conditions.

### Contact Information

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