

Manta WS117

Concentrated Solvent-Dilutable Stone Impregnator

Description

Manta WS117 is a highly concentrated solvent-based siloxane impregnator designed for the ultimate protection of natural stone and mineral substrates. Supplied as an active concentrate, it strictly requires dilution with suitable organic solvents prior to application.

Reaction Mechanism: Once applied, the diluted formulation penetrates deeply into the substrate's capillary system. Catalyzed by ambient atmospheric moisture, the active siloxane ingredients undergo rapid hydrolysis and condensation (cross-linking). This process forms a nano-scale, permanent polysiloxane network that is invisible to the naked eye, ensuring the substrate remains fully breathable.

Features

- **Exceptional Hydrophobicity:** Delivers superior water repellency and anti-fouling resistance, protecting the substrate from waterborne contaminants and decay.
- **Invisible Protection:** Leaves no surface film, completely preserving the natural color and aesthetic integrity of the substrate.
- **Extreme Durability:** Harnesses the inherent anti-aging, anti-static, and anti-corrosion properties of silicone technology. Depending on the application method and regional environment, the functional lifespan ranges from 5 to 15 years.
- **Formulation Flexibility:** Highly miscible with a wide range of standard aliphatic hydrocarbon solvents (e.g., mineral spirits, white spirit, 120#, 200#, or D40).

Typical Physical Properties

Manta code:	WS117
Chemical Name:	Concentrated Silane/Siloxane Blend
Appearance:	Colorless transparent liquid
Viscosity(25°C, mm ² /s):	18-30
pH:	6-8
Density(g/cm ³):	0.995-1.015

Application

Manta WS117 is a heavy-duty impregnator suitable for a wide spectrum of architectural engineering structures:

1. **Natural Stone & Timber:** Highly effective for the hydrophobic treatment, anti-corrosion, and color preservation of stone masonry and structural wood.
2. **Civil Engineering & Infrastructure:** Delivers exceptional weatherproofing, moisture protection, and durability enhancement for mass concrete structures, including bridge piers, tunnels, subway

systems, and railway stations.

How to use

1. Dilution Procedure (Strictly Solvent-Based)

This product is an active concentrate. Dilute the WS117 agent WITH a suitable aliphatic hydrocarbon solvent (e.g., mineral spirits, D40) at a ratio of 1:10 to 1:20.

Mix mechanically until a fully homogeneous solution is achieved. (CRITICAL: Never mix or dilute with water).

2. Substrate Preparation & Application

Ensure the substrate surface is completely dry, clean, and free of oil and dust.

Apply the diluted solution evenly to the target surface via soaking or spraying. Ensure a saturating coat.

3. Curing & Effectiveness

Optimal hydrophobic and protective performance fully develops after 24 to 36 hours of natural ambient curing, depending on substrate absorption rates.

Precautions

Flammability Hazard: While we notes the raw concentrate is relatively stable, once diluted with hydrocarbon solvents, the working solution becomes HIGHLY FLAMMABLE. Keep away from open flames, sparks, and high heat during dilution and application.

Ventilation: Apply only in well-ventilated areas. Applicators must wear appropriate solvent-resistant respirators, gloves, and eye protection.

Packaging

In 25kg, 50kg, 200kg drum, or customized.

Safety and Storage

Keep in a cool, well-ventilated, and dry place. Strictly avoid direct sunlight. Maintain storage temperatures between -30°C and 50°C. Shelf life is 12 months.

Contact Information

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