

Manta WS370

Fluorine-Free Water-Repellent Emulsion

Description

Manta WS370 is a water-based, silicone-modified, fluorine-free water-repellent emulsion with a nanometer particle size. It can be easily diluted with water and applied directly at room temperature. It is engineered to deliver exceptional performance for both high-end textile finishing and the durable protection of porous architectural substrates.

Similar to Momentive CoatOSil 2059.

Typical Physical Properties

Manta code:	WS370
Appearance:	Translucent milky white liquid
PH Value:	4-7
Ionic type:	Weakly cationic
Miscibility:	Fully miscible

Features & Benefits

- **Textile Enhancement:** Provides woven and knitted fabrics with excellent water droplet roll-off properties, while imparting a soft, drapable, and elastic hand feel. Significantly improves the wash-and-wear properties, crease recovery angle, sewability, and tear strength of treated fabrics.
- **Architectural Protection:** Thanks to its nanometer particle size and weakly cationic nature, it penetrates deeply and bonds firmly to porous mineral building materials. It forms a breathable, long-lasting hydrophobic barrier without altering the substrate's original appearance.
- **Eco-Friendly:** 100% fluorine-free (PFAS-free) formulation, meeting stringent environmental standards.

Applications

1. **Textiles and Leather:** Durable water-repellent (DWR) finishing for outdoor apparel, technical fabrics, and leather treatments.
2. **Architectural & Hard Surfaces:** Deep-penetrating water repellent and stain protection for concrete, natural stone, brickwork, stucco, and masonry.

Application Guidelines

1. **Textile Padding Process:**

Dilute Manta WS370 with deionized water to a working concentration of 30–80 g/L, depending on the specific fabric. Dry and cure the treated fabric at 150°C – 180°C for 0.5 to 3 minutes. If 6–10 g/L of a cross-linking agent is added to the finishing bath, it can further enhance both the water-repellent performance and wash durability.

2. Architectural Surface Treatment:

Dilute the emulsion with clean water to the desired working concentration (typically 1:10 to 1:20 ratio, depending on substrate porosity). Apply evenly onto clean, visibly dry surfaces using a low-pressure sprayer, brush, or roller. Allow the treated surface to dry and cure naturally at room temperature for 24 to 48 hours to achieve maximum water repellency.

Packaging

In 200kg drum

Notice

This product provides strong water-repellent properties. Before using it in combination with other textile additives (especially anionic auxiliaries) or for new architectural substrates, please conduct preliminary compatibility and spot tests.

Storage & Transport

Protect from direct sunlight. It can be transported as a non-hazardous chemical.

Contact Information

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