Ultimate Stain Repellent

Hydrophobic & Oleo-phobic spray on repellent



Product Description:

A clear penetrating breathable VOC compliant surface treatment for use on concrete, brick masonry units and natural stone. The unique silane treatment penetrates into the substrate and chemically bonds with silica to form a permanent attachment of the water repellent molecule.

In addition, an oil repellent additive resists the ingress of motor oil, transmission fluid, diesel fuel and other automotive fluids. This additive also repels food products such as mustard, ketchup, food grease, milk, wine, beer and soft drinks. Creates a deep hydrophobic layer which prevents the ingress of water and water borne contaminants from entering the substrate and causing premature deterioration. By combining a low surface tension with a tailored rate of reaction, Ultimate Stain Repellent is able to move through the moisture boundary layer which lines the pore structure of the substrate. This permits the development of uniform gradient permeation or a consistent level of protection throughout the entire depth of penetration. This allows for a longer life of the treatment especially on wearing surfaces.

Uses:

For use on vertical or horizontal concrete and masonry surfaces to repel water and oil based materials from penetrating into the substrate. Reduces staining and discoloration of concrete, brick masonry, limestone, marble, granite, natural stones and other building materials due to oil and water borne contaminants.

For use on reinforced concrete to protect against corrosion due to water, deicing salts and salt water. Apply to masonry to prevent the ingress of wind driven rain while maintaining surface appearance and breathability

Main Advantages:

- Excellent resistance to automotive fluids
- Excellent repellent of food products
- Reduces staining
- Excellent resistance to chloride ion ingress
- Breathability
- Mitigation of AAR & ASR deterioration
- Deep penetration into substrate
- No change in surface appearance
- · High resistance to alkali attack
- Long service life Lasts 5–10 years

Ultimate Stain Repellent is a mixture of an alkyltrialkoxy silane and a proprietary oil repellent additive. Ultimate Stain Repellent penetrates deeper than traditional silane and siloxane products due to its unique chemistry. This deeper penetration gives a long lasting, high performance water and chloride screen. By greatly reducing water entering the substrate and with it being a breathable system, a "drying out" of the substrate occurs.

The oil repellent additive creates an area of extremely low surface tension on the substrate. This effect renders the surface resistant to the ingress of oil based materials. In addition, the repellent effect against food product is much greater than that imparted by traditional water repellent.

Ultimate Stain Repellent Hydrophobic & Oleophobic spray on repellent



The primary function of the Ultimate Stain Repellent is to allow easier cleanup and reduce staining of the substrate due to the adsorption of various oil and water based contaminants. If spills are not cleaned up in a timely manner staining and adsorption into the substrate will still occur. Contact your Ultimate Stain Repellent representative for compatible cleaning methods.

Application:

Concrete must be allowed to cure a minimum of 28 days. All repointing must be complete and allowed to cure at least 3 days. Patching materials, caulking, sealing materials, traffic paint must be fully cured before applying Ultimate Stain Repellent.

All surfaces must be cleaned to remove all traces of dirt, dust, efflorescence, mold, salt, grease, oil, asphalt, laitenance, curing compounds, paint, coatings and other foreign materials. Acceptable surface cleaning methods include shotblasting, sandblasting, waterblasting, and chemical cleaners.

Ultimate Stain Repellent should be applied using low pressure (15 to 25psi) pumping equipment with a wet fan type spray nozzle. Alternate methods include power roller with a 1" nap or by brush. Do not alter or dilute the material. Do not apply to a wet substrate. A test patch should be applied to the substrate to verify coverage rate and application conditions.

Protect glass, metal, plastic and other non-porous substrates from over spray. Ultimate Stain Repellent will not etch glass but will leave a residue on non-porous surfaces.

Coverage Rates:

Not intended for below-grade waterproofing. Should not be applied in temperatures below 40°F, if rain is expected within two hours following application, or if high winds or other conditions prevent proper application. If rain has preceded the application, the surface should be allowed to dry at least 24 hours.

Concrete: 250 ft²/gal HVLP, low pressure pumping

Sand Limestone: 240 ft²/gal HVLP, low pressure pumping Marble & Granite: 650 ft²/gal polishing, (microfiber glove) **Glazed Brick:** 650 ft²/gal polishing, (microfiber glove)

Red Brick: 325 ft²/gal HVLP, Flooding Stucco: 250 ft²/gal HVLP, Flooding

Limestone & Bluestone: 240 ft²/gal HVLP, Flooding

Test Data

Absorption of automotive fluids - Time to fully absorb into concrete substrate.

Motor Oil:

Transmission Fluids:

4.5 Hours Untreated Surface Treated Surface 2.5 Hours Treated Surface 8+ Days Treated Surface 8+ Days

Food Products - Staining Resistance:

excellent Ketchup Mustard excellent excellent Soy Sauce

Water Absorption - 24 Hours

Untreated Surface 4.23% Treated Surface 0.23%

ASTM-2074 "Surface Friction"

No change in surface friction from untreated to treated.

Limitations:

Not intended for below-grade waterproofing. Should not be applied in temperatures below 40°F, if rain is expected within two hours following application, or if high winds or other conditions prevent proper application. If rain has preceded the application, the surface should be allowed to dry at least 24 hours.