

PS105 Silane Water Repellent WB-40 Penetrating Sealer

Low VOC, Water Based Sealer for Dense Concrete & Masonry

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Product Description

PS105 is a water based penetrating, 40% chemically reactive triethoxyoctylsilane which repels water and moisture from concrete and masonry offering invisible protection and a low VOC. At only 5 angstroms, its small particle size makes it ideal for very dense substrates made of high performance concrete such as cast in place, poured in place, and reinforced surfaces. It penetrates deeply and chemically reacts with unsealed concrete and masonry components for long lasting protection. PS105 seals pores and capillaries of substrates limiting water and moisture absorption while allowing excellent vapor transmission. It combats efflorescence, freeze/thaw damage, deicing chemicals, acid rain deterioration, salt intrusion, UV damage, scaling and spalling, dirt buildup, mold and mildew, alkali attack, and corrosion of reinforcing steel. It is designed to provide a high level of penetration to protect against wind driven rains. It is also UV resistant and nonyellowing. PS105 has a milky white appearance. Upon proper application, the substrate will have little, or no, noticeable change in appearance when dry.

Recommended Uses

PS105 was originally developed for commercial and industrial applications and is widely used throughout North America to this day for those applications. Concrete Sealers USA is now also making this professional grade sealer available to the residential market so small contractors, applicators, and do-it-yourselfers can enjoy the same superior benefits that architects, engineers, and large contractors have enjoyed for years. PS105 is recommended for sealing dense concrete and masonry surfaces. It is ideal for sealing commercial and residential structures such as parking lots and structures, marine structures, loading docks, median barriers, bridge decks, pavements, piers, ramps, plazas, courtyards, and balconies. It is also recommended for home and building exteriors, driveways, sidewalks, walkways, porches, steps, pool decking, patios, and other concrete and masonry surfaces. It is suitable for horizontal or vertical and interior or exterior applications. Not intended for below grade waterproofing.

Product Characteristics

SDS Information / Physical and Chemical Properties

Boiling Point:	212° F	pH:	7
Vapor Pressure:	N/A	Flashpoint:	203° F
Solubility in Water:	Yes	Flammable Limits:	Lower Limit: N/A; Upper Limit: N/A
Evaporation Rate:	N/A	Finish:	Flat/Clear
Appearance and Odor:	Milky White w/ No Odor	Drying Time**:	Dry to touch 1-3 hours; traffic 6-12 hours
Specific Gravity:	(H ₂ O-1): .93	Shelf Life:	2 years unopened
% Volatile by Volume:	260 g/L		

Coverage Rates*: 150-250 sq. ft./gal. for dense concrete and masonry surfaces.

*Coverage rates are approximate and for estimating purposes only. Application rate based upon porosity and absorption. Always test absorption prior to application.

**Drying times are for estimating purposes only. Actual drying time is based upon temperature, humidity, and air flow.

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Performance Characteristics

ASTM C672 Scaling Resistance:	100 Cycles - 0 Rating (non air-entrained concrete)
ASTM C642 Water Absorption:	.25% in 24 hours; .48% in 48 hours; 1.2% in 50 days
ASTM D1653 Water Vapor Permeability:	64 grams per sq. ft. in 24 hours, 93% breathability
ASTM E303 Skid Resistance:	Dry Surface: No Change; Wet Surface: No Change
AASHTO T259 90 Day Salt Ponding:	0.0-0.5" depth: 92% Reduction; 0.5"-1.0" depth: 95% Reduction; 1.0"-1.5" depth: 85% Reduction
NCHRP 244 Series II:	85% Reduction in Water Absorption
NCHRP 244 Series II:	87% Reduction in Chloride Ion Absorption
NCHRP 244 Series IV:	98% Reduction in Chloride Ion Absorption

Color

PS105 has a milky white appearance. Upon proper application, the substrate will have little, or no, noticeable change in appearance when dry.

Ordering & Shipping Information

Packaging:	5 gal. Pails 55 gal. Drums
Shipping:	Normal package delivery and trucking

Surface Preparation

Substrates to be sealed must be a minimum of 28 days old and/ or be fully cured. The surface must be clean and porous enough to allow penetration into the substrate. Surfaces should be clean and free of surface laitance, dust, dirt, debris, mildew, oil, grease, previous sealers, curing agents, paint or other surface coatings, and other contaminants. If acid or other cleaning compound is used for cleaning or etching the surface, neutralize the surface completely before application of PS105.

Application

Always test porosity prior to application. Surface should be dry for proper penetration of the sealer. Should not apply to wet or damp surfaces or if rain is expected within 12 hours after application. Product is a one part system and requires no special mixing. Stir material thoroughly before and during application. Do not apply below 40°F or above 95°F during the application or drying period. Apply uniformly with a low pressure sprayer. When applying material, work in small, manageable areas at a time in order to maintain a wet edge. Product should be applied to the point of rejection and be fully absorbed within 10 minutes without puddles. Use a broom, roller, or brush to evenly distribute product as well as disperse any puddles as excessive or over application may cause discoloration of the substrate. For dense surfaces, one saturation application is generally sufficient. However, for porous surfaces where additional product can be absorbed, multiple saturation applications may be applied to enhance performance. Clean application materials with warm water.

Limitations

PS105 is designed to work only on cured dense concrete and other masonry substrates and is not intended for asphalt. This product may damage vegetation or leave a residue on glass, vinyl, plastic, aluminum, metal, and painted surfaces. Avoid contact with eyes and skin. Sealer may be damaged if frozen prior to use. Not intended to seal cracks. Will not remediate structurally unsound surfaces with defects. PS105 is not oleophobic and is not intended as an oil repellent. The Company does not warranty specific performance results or compatibility with products manufactured by others. The Company shall bear no liability, other than replacement of defective product. A small test must be conducted prior to application. Based upon this test, the purchaser shall determine for themselves the suitability of this product for the intended use.

Environmental & Regulatory

PS105 contains no solvents and <260 g/L Volatile Organic Compounds (VOC). This product is considered a hazardous chemical under OSHA Hazard Communication Standard (29CFR 1910.1200). Contact may cause skin or eye irritation. Using with adequate air ventilation, eye protection, and gloves is recommended.

Safety & First Aid Precautions

Eyes:	Flush with water for at least 15 minutes.
Skin:	Wash thoroughly with soap and water.
Inhalation:	Move subject to fresh air.
Digestion:	Consult physician immediately.