PS102 Siliconate Water Repellent WB Penetrating Sealer

Low VOC, Water Based Sealer & Curing Agent for Rough Concrete & Masonry

Product Description

PS102 is a chemically reactive deep penetrating siliconate sealer that is intended for unsealed and uncolored rough concrete and masonry. It creates a cross-linked insoluble methyl-silicone internal membrane that fuses within porous substrates of broom finished concrete and concrete block to combat freeze/thaw damage, reduce scaling and spalling, impart water repellence, and restrict moisture absorption. It also limits harmful effects of deicing chemicals and salts, acid rain deterioration, alkali attack, corrosion of reinforcing steel, and UV damage. PS102 decreases efflorescence and dusting, limits dirt build up, retards mold and mildew, and makes easier to clean and maintain. PS102 is breathable with minimal impact to traction coefficient. PS102 also contains film forming polymers for enhanced curing of broom finished concrete by allowing the slow release of moisture during the curing process while maintaining excellent breathability. The film forming polymers also provide superior freeze/ thaw protection in harsh climates. It is also UV resistant and nonyellowing. PS102 has a light milky appearance. Upon proper application, the substrate will have little, or no, noticeable change in appearance when dry.

Recommended Uses

PS102 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. PS102 is recommended for curing new broom finished concrete and for sealing existing unsealed and uncolored broom finished concrete and porous concrete block. It is ideal for sealing commercial and residential structures such as parking lots and structures, driveways, sidewalks, walkways, porches, steps, pool decking, patios, foundations, block walls, and retaining walls. 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:**	11.5
Vapor Pressure:	17.5 mmHg @ 20° C	**Flashpoint:**	N/A
Solubility in Water:	Yes	**Flammable Limits:**	Lower Limit: N/A; Upper Limit: N/A
Evaporation Rate:	Similar to water	**Finish:**	Flat/Clear
Appearance and Odor:	Light Milky w/ Slightly Amine Odor	**Drying Time**:**	Dry to touch 1-3 hours; traffic 6-12 hours
Specific Gravity:	($H_2$0-1):1.1 to 1.3 @ 20°C	**Shelf Life***:**	2 years unopened
% Volatile by Volume:	8 g/L		

Coverage Rates*: 200-250 sq. ft./gal. for broom finished concrete surfaces.
125-175 sq. ft./gal. for concrete block.

*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, air flow.

***Store container upright indoors in a cool, dry place and maintain temperature of 55°F to 85°F.

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Performance Characteristics

ASTM D2939:	Resistance to water solubility, flexibility: No cracking
ASTM D466:	Resistance to water flow and action: Excellent adhesion. No re-emulsification
ASTM E96:	Water vapor transmission: .04 grains/sq/ft./hr. Water permeability: .102 perms
ASTM C836:	Film thickness on a vertical scale: Passed
SS-W-110C:	Water repellence on masonry test: 1.925%
ASTM C666:	Freeze/ Thaw (1000+ cycles): Passed. .0096%
ASTM C672:	Scaling Resistance: Passed. No scaling
ASTM C156:	Water retention specification (0.47 kg/m2) – 0.55 kg/m2
ASTM C309:	Passed, Moisture Loss – 0.21 kg/m2, Type 1, Class A&B
AASHTO M148:	Passed, Moisture Loss – 0.21 kg/m2
ASTM C1315-6.6.4:	1000 megajoules/ 235nM UV Light adhesion
AASHTO 259 and T260:	90 Day Ponding: Passed
UV-Testing (Modified):	No change. Excellent results
ASTM-Elcometer Pull (280 lbs):	Concrete failed 1st. No delamination
ASTM C642:	Absorption: Phase 1 (48 hrs): 0.62%; Phase 2 (50 days): 1.25%
NCHRP 244, Series IV (4.1 Southern Exposure):	Absorbed chloride: <7%
NCHRP 244, Series IV (4.1 Northern Exposure):	Absorbed chloride: <7%
NCHRP 244 Series (11 Cube Test: 3.1):	<12% weight gain
NCHRP 244 Series (11 Cube Test: 3.2):	<9% absorbed chloride
Moisture Vapor Transmission Rate:	2%

Color

PS102 has a light milky appearance. Upon proper application, the substrate will have little, or no, noticeable change in appearance when dry.

Ordering & Shipping Information

Packaging: 1 gal. Jugs
5 gal. Pails
55 gal. Drums

Shipping: Normal package delivery and trucking

Surface Preparation

The surface must be 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 PS102.

Application

Always test porosity prior to application. Surface should be dry for proper penetration of the sealer. Should not apply to damp or wet 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 and 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 application may result in white residue (especially on darker surfaces) which will not affect sealer performance and generally dissipates over time or by power washing. Generally, only one application is required. For curing new concrete, apply PS102 after all bleed water is gone, finishing is complete, and the concrete will withstand the weight of a person and not be marred. For new concrete where additional product can be absorbed, a light secondary application of PS102 may be able to be applied any time after 24 hours to enhance performance. Clean application materials with warm water.

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Limitations

PS102 is designed to work only on porous concrete and masonry substrates and is not intended for asphalt. This product may damage vegetation or may etch glass, vinyl, aluminum, plastic, and metal. 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. PS102 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

PS102 complies with EPA, FDA and OSHA strict requirements and contains no solvents and only 8 g/L Volatile Organic Compounds (VOC). This product is considered a non-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.

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