

## OVERVIEW & FEATURES

Protector SS is a one component, water-based, multifunctional, self-crosslinking, water soluble alkylalkoxy silane and siloxane designed to treat a wide variety of mineral substrates, including architectural concrete, concrete block, split-face block, pavers, stucco, porous and dense brick, clay tile, exposed aggregate concrete, sandstone, and slate.

- Provides excellent water repellency to reduce cracking, spalling, freeze-thaw damage, chemical degradation, biological growth, efflorescence, and dirt pickup, thereby lengthening substrate life and reducing maintenance costs
- Provides excellent beading for improved aesthetics
- EPA compliant - Low VOC emissions on curing
- Formulated to minimize darkening effects thus not changing substrates appearance (20% strength or less.)
- Good performance on both neutral and highly alkaline surfaces providing application field flexibility
- Physically and chemically bonds to substrate
- Product is UV stable and will not discolor
- Product is resistant to biological degradation for longer service life
- Coatings are vapor permeable to resist cracking, peeling, blistering and allows for carbonation to continue after the coating's application. This allows for lengthened substrate life and for greater substrate structural strength over time.

## FINISH CHARACTERISTICS

This product does not change the overall appearance of the substrate. After the material is applied and allowed to dry for 24 hours, it will not be readily apparent that the application has occurred, except the surface will exhibit excellent water repellency.

## ABRASION RESISTANCE & ADHESION

The application of this product will increase the abrasion resistance of most substrates. Results will vary according to substrate type. Because this material becomes an integral part of the surface that is coated and does not form an impermeable barrier, delaminations do not occur.

## STORAGE & SHELF LIFE

Protector SS has a recommended shelf life of six months from date of manufacture when stored in unopened containers and between 50°F and 80°F. Refer to product packaging. Store product in an area to bring the material to normal room temperature before using. Keep from freezing.

## PACKAGING SIZES

Packaged in one (1) gallon (3.78L), five (5) gallon (18.93L), and 55 gallon (208.2L) units.

## SURFACE PREPARATION

All dirt, oil, dust, foreign contaminants, and sealers must be removed to assure a trouble-free application. This product will work on a wide variety of substrates, but a test patch should be placed prior to undertaking the application. The surface to be treated should be dry and should remain dry for a 24 hour period after the application. Prepare surface by abrasive blasting, acid etching, solvent degreasing, caustic soda scrubbing, or high pressure washing. If strong acidic or alkaline cleaning agents are used, neutralize the surface, and remove all residue before application. Always apply a test patch to insure product suitability.

## APPLICATION

Apply material between 45-95°F (7.2-35°C). Stir material before using. Apply material without thinning when at a 20% concentration or dilute with water when using the 40% concentration according to the required concentration level necessary. Apply material with a brush, roller, or spraying equipment. Apply the treatment to the surface until it is saturated without puddles. Typical application rates will be about 125 square feet (11.6m<sup>2</sup>) per gallon. Apply two coats using a wet-on-wet procedure to ensure complete coverage. Maximum water repellency is achieved in 72 hours depending on environmental conditions. Beading generally improves over time. Do not use for below grade applications or where water pressure is from interior walls. Do not apply to plastic or foam substrates. Penetrating sealer will not prevent water passage through unsound or cracked surfaces. Protect surrounding areas from overspray or splatter. Allow material to dry for 24 hours to obtain the maximum benefits of the application.

## RECOAT OR TOPCOATING

Two coats are recommended. Substrates that are coated with concentrations at 10% or less are generally re-coatable and will improve the adhesion on mineral substrates.

## CLEANUP & FLOOR CLEANING

Use any suitable detergent and water. Caution! Although very unlikely, some cleaners may affect the color of the treated surface. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

## RESTRICTIONS

Restrict the use of the substrate to light traffic and non-harsh chemicals including water until 24 hours has passed. Keep the area dry for this period (excluding the application of the product.). Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.

# Protector SS

Coverage Rates & Dilution			
Substrate	Coverage rate	Dilution ratio recommendation (based on 40%)	
	Sq. ft/Gal (M <sup>2</sup> /L)	%	Ratio
Architectural Concrete	80 (7.4)	6.6	5:1
Concrete block	80 (7.4)	6.6	5:1
Split-face block	125 (11.6)	10.0	3:1
Concrete pavers	40 (3.7)	3.3	10:1
Stucco	125 (11.6)	10.0	3:1
Porous brick	150 (13.9)	10.0	3:1
Dense brick	350 (32.5)	20.0	1:1
Clay tile	75 (7.0)	6.6	5:1
Exposed aggregate concrete	325 (30.2)	20.0	1:1
Sandstone	125 (11.6)	10.0	3:1
Slate	450 (41.8)	40.0	0:1

Technical Data	Protector SS
<b>Volatile Organic Content</b>	Less than 140g/l
<b>Shelf Life</b> stored between 50°F-80°F (10°C-26.6°C)	6 months, unopened
<b>Recommended Film Thickness</b> (spraying or mopping)	Apply until surface is saturated without puddles
<b>*Set Time @ 70°F (21.1°C)</b> Primer Topcoat	Allow to dry for a 24 hours N/A N/A
<b>Application Temp.</b> 55°F-90°F (12.7°C-32.2°C)	*when properly used, can reduce water absorption while still maintaining >50% breathability
<b>Coverage</b> (per gallon)	100-400 sq. ft.
<b>Packaging</b> (containers)	5 gallon (18.9 l) 50 gallon (189.2 l)
<b>Viscosity</b>	< 25 cps

\* Time varies depending on air temperature and humidity.

For specific recommendations and coverage rates, please contact your local Garland Representative.

For more information, visit us at: [www.garlandco.com](http://www.garlandco.com)

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Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. A ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local Garland Representative or Garland Corporate Office for more information.

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