Armor S2000 Sodium Silicate
Concrete Densifier & Surface Hardener

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For Professional Use

PRODUCT DESCRIPTION

The Armor S2000 is ready to use right out of the bottle! It penetrates deep into the surface of the concrete where it chemically reacts to form a permanent Calcium Silicate Hydrate (CSH) structure within the pores. Concrete sealed with the Armor S2000 will experience an increase in surface strength and density up to 45%. While the Armor S2000 is a breathable sealer, the movement of water, moisture, and efflorescence through the pores of the concrete will be reduced. Can be applied to interior or exterior surfaces.

BENEFITS/FEATURES

- Creates a permanent, hardened structure within the pores
- Ready to use, no mixing or diluting required
- Penetrating, breathable, zero VOC
- Reduces water seepage through concrete
- Reduce freeze-thaw damage and road salt damage
- Reacts with alkalis to reduce efflorescence
- Reduces humidity by restricting water vapor inflow
- Reduces the growth of mold, mildew, and algae
- Prevents the rusting and expansion of rebar
- Hardens the surface by up to 45% to reduce concrete dusting

SUGGESTED APPLICATIONS

- Poured, broom finished, and troweled concrete.
- Polished Concrete
- Driveways, walkways, and stairs.
- Pool decks and patios.
- Garage, warehouse, and basement floors and walls.
- Car ports, pole barns, retail and restaurant floors.

TECHNICAL INFORMATION

Solids……25%
Drying Time……1-2 hours
Re-Coat Time……..……2-3 hours
Foot Traffic.....12-24 hours
Wheel Traffic.....24 - 48 hours
Application Temp.....45°F - 85°F

Wet Appearance.....Clear
Dry Appearance.....Invisible
VOC Content.....0 VOC
Blush Resistance.....Excellent
Solvent Resistance.....Excellent
Concrete Adhesion.....Excellent

COVERAGE

Old or Porous Surfaces	175-200 ft^2 /gallon in one coat
Dense or Trowel Finished Surfaces	350-400 ft^2 /gallon in one coat

Coverage rates will vary depending upon surface porosity and texture, and application method. Excessive build up should be avoided.

COMPLIANCES

- VOC and OTC compliant in all 50 states

SHELF LIFE

When properly sealed and stored, the shelf life of the Armor S2000 is up to 1 year.

PACKAGING

The Armor S2000 is available in a 16 OZ Sample, 1 Gallon Bottle, 5 Gallon Pail, and 55 Gallon Drum.

APPLICATION INSTRUCTIONS

PREPARATION: Protect all people, property, and plants in case splash and wind drift could occur. Do not apply to any surface that is dirty, frozen, or heavily saturated or flooded with water. Surface must be clean and free of all debris, dry, and absorbent. Mist water in a small area to test the surface for absorbency. Any surface to be treated should uniformly wet out. If the surface to be treated does not wet out uniformly, it is then recommended to prepare the surface mechanically to remove any remaining surface contaminants.

APPLICATION:
New (Uncured) Concrete: It is not traditionally recommended to apply Armor S2000 to concrete earlier than 7 days. If this application is necessary, ensure the removal of all soft cut saw debris prior to application. Apply after final troweling at a rate of 300-400 sq. ft. per gallon using an industrial grade sprayer with a 0.5 gal./min. fan tip, lint free mop, or soft bristle push broom. Ensure floor saturation, removing any puddle areas with a soft bristle push broom or mop. Apply more Armor S2000 to areas that appear to be more porous and are absorbing the material more. **If excess** Armor S2000 **is allowed to dry on the concrete surface, a white residue may form and can only be removed by mechanical means such as sanding or grinding process.**

Existing Concrete: Apply at a rate of 200-300 sq. ft. per gallon using an industrial grade sprayer with a 0.5 gal./min. fan tip, lint free mop, or soft bristle push broom. Ensure floor saturation, removing any puddle areas with a soft bristle push broom. Apply more Armor S2000 to areas that appear to be more porous and are absorbing the material more. Rework any excess material with a soft bristle broom. **If excess** Armor S2000 **is allowed to dry on the concrete surface, a white residue may form and can only be removed by mechanical means such as sanding or grinding process.**

Polished Concrete: After completing the 400 grit stage of polishing, apply a uniform coat of Armor S2000 at a rate of 200-300 sq. ft. per gallon using an industrial grade sprayer with a 0.5 gal./min. fan tip, lint free mop, or soft bristle push broom, ensuring floor saturation. Do not allow to puddle. **If excess** Armor S2000 **is allowed to dry on the concrete surface, a white residue may form and can only be removed by mechanical means such as sanding or grinding process.** Follow through with additional polishing steps until desired appearance is achieved. Additional applications of Armor S2000 can be added at any stage before the final polishing phase is done if necessary at a rate of 200-300 sq. ft. per gallon. Remove any excess residue with polishing diamonds or polishing pads. Flushing with water is not necessary. Note: For softer concrete an initial application of Armor S2000 can be applied after the 80 grit stage prior to the standard polishing steps to achieve a harder surface.

PLEASE NOTE: It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc. If applying by spray method, extended coverage rates may be achieved, but be aware that less material will be applied and performance expectations may be limited.

CLEAN-UP

Use warm water and soap. Dispose of containers in accordance with local and federal regulations.

PRODUCT REMOVAL

Once the Calcium Silicate Structure (CSH) has hardened within the pores it can not be removed unless the concrete itself is removed.

PRECAUTIONS AND LIMITATIONS

- Armor S2000 is water based and will freeze. Store in an area between 40-80 degrees F and do not allow to freeze.
- Do not puddle or apply in thick coats.
- Do not apply undiluted.
- Coverage rates depend upon many conditions including application method, surface porosity, and applicator.
- Do not use on colored concrete surfaces.
- The use of high alkaline or acidic cleaners on the treated surface is not recommended and can be damaging.
- Protect metal, glass, wood, brick, and painted surfaces. Wash immediately with clean water if contact occurs.
- Armor S2000 is harmful if swallowed.
- It is important to follow the application instructions. If excess material is allowed to dry on the surface a white residue may form and can only be removed by mechanical means such as sanding or grinding.

CONTACT

Still have questions? Contact a Foundation Armor Technician at 866-306-0246.