

AQUALON™ SP-450

sodium silicate-siliconate polymer concrete densifier

POLISHING PRODUCTS



Aqualon SP-450 is a water based blend of 100% active sodium silicate and siliconate polymers that penetrate the surface to increase density, hardness, and strength of the concrete. Those properties reduce dusting, tire marks, and maintenance on the surface. Aqualon SP-450 penetrates deeply into the surface filling the pores and capillaries of the concrete and reacting with the free lime and calcium carbonate therefore yielding a protected, hardened, and dense floor.

Key Features & Typical Benefits

- Effective on new and old concrete surfaces and very easy to maintain. Combats surface ASR.
- UV stable and resistant to abrasion and scuffing.
- Non-flammable and odorless formula for easy indoor use.
- Contains 0 g/L VOC content making this product legal for sale to all regions of the US and Canada.

Recommended Applications

Effective on applications such as...

- Polishing Systems
- Broom Finished
- Troweled Concrete
- Burnished Concrete
- Many other concrete floor applications where a floor densifier is specified.



Specifications / Compliances

- Meets OTC, CARB, LADCO & SCAQMD VOC restrictions.

Typical Properties & Technical Information

PROPERTY	VALUE
Solids/Active Content, Percentage by weight	N/A
Dry Time - Tack Free	1 - 2 hours
Dry Time - Foot Traffic	12 - 24 hours
Dry Time - Heavy Traffic	24 - 48 hours
Re-Coat Time Window	2 - 3 hours
Application Temperature	50° F - 80° F
VOC (Volatile Organic Compound) Content	0 grams/Liter
Appearance - Wet	Clear (May show slight haze)
Appearance - Dry	Crystal Clear

Testing in accordance with procedures outlined in EPA Method 24, "Volatile Organic Content VOC of Paints and Related Coatings". The solids content was determined in accordance with ASTM D 5095 and the VOC was calculated in accordance with ASTM D 3960.

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Application Instructions

SURFACE PREP: Protect all people, property, and plants not to be treated with Aqualon SP-450 as product 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.

Substrate temperature must be no less than 40 degrees F and not exceed 80 degrees F.

MIXING: No mixing is necessary prior to application.

COVERAGE RATE:

	<i>First Coat</i>	<i>Second Coat</i>
Freshly placed, uncured, troweled concrete	200-300 ft ² per gallon*	200-300 ft ² per gallon*
Cured, troweled concrete	300-400 ft ² per gallon*	300-400 ft ² per gallon*
Cured, ground concrete	200-300 ft ² per gallon*	200-300 ft ² per gallon*

*Coverage rates vary depending upon surface porosity, texture, and application method.

APPLICATION:

New (Uncured) Concrete: It is not traditionally recommended to apply Aqualon SP-450 to concrete earlier than 28 days. If this application is necessary, ensure the removal of all soft cut saw debris prior to application. 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 or mop. Apply more Aqualon SP-450 to areas that appear to be more porous and are absorbing the material more. After saturating the floor, mist water on the surface and squeegee the fluid to the next area to be coated or remove with wet-vac. If excess SP-450 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 for 30-60 minutes, removing any puddle areas with a soft bristle push broom. Apply more Aqualon SP-450 to areas that appear to be more porous and are absorbing the material more. Rework any excess material with a soft bristle broom. After saturating the floor, mist water on the surface and squeegee the fluid to the next area to be coated or remove with wet-vac. If excess SP-450 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 saturating, uniform coat of Aqualon SP-450 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 for 30-60 minutes. Do not allow to puddle. If excess SP-450 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 Aqualon SP-450 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 Aqualon SP-450 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 liquids/coatings and substrates depending on porosity, density, texture etc. If applying by spray method, extended coverage rates may be

Precautions and Limitations

- This product will freeze during storage. Store at temperatures above 40°F.
- Do not puddle or apply in thick coats. This product should be applied only as explained above.
- This product is harmful if swallowed. Abide by recommended safety guidelines.
- This product is not a curing compound. Use on concrete less than 3 days old may result in a reduction of effectiveness.
- This product was designed for exterior as well as interior decorative concrete.
- It is not recommended to thin product.
- It is recommended to test this product prior to using on entire application.
- 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.

CLEAN-UP: Use soap and water. Dispose of containers in accordance with local, state and federal regulations.

PRODUCT REMOVAL: Attempted removal of this product is not recommended.

SHELF LIFE: Up to one year from manufacture date in its original, unopened container stored at room temperature.

PACKAGING: Available in 1 gallon, 5 gallon and 55 gallon containers.

Always read all technical information, label and SDS prior to use. This information can be found online or by calling customer service at the number below.