



Concrete Densifier

Penetrating Sealer

PRODUCT DESCRIPTION AND USE

Concrete Densifier is a reactive silicate solution used to densify and improve the properties of concrete as well as reduce the level of undesirable alkalinity. Because of its extremely small molecules and low surface tension, the material is able to penetrate deeply into the concrete's micro-pore structure, occupying accessible porosity and other tiny voids. The silicates in the solution then react with available free alkali such as calcium hydroxide to form calcium silicate hydrate, the desirable reaction product formed during concrete's hydration process. This water insoluble compound occupies space in the pore structure making the concrete denser and less permeable, especially in the top section of the concrete.

The following benefits are obtained when using Concrete Densifier:

1. Better resistance to freeze/thaw damage
2. Preserves embedded steel
3. Reduces dusting
4. Makes ice removal easier
5. Increases acid/chemical resistance
6. Reduces potential for Alkali Silicate Reactivity (ASR)
7. Halts or severely retards efflorescence
8. Increases abrasion resistance
9. Does not alter surface appearance

All concrete, regardless of age can benefit from the Penetrant. It is very suitable for densifying polished concrete. The Penetrant is an odorless, non-hazardous water based material that is environment and user friendly.

Chemical Composition

Catalytic silicate in a Lithium and water solution

Colors

Clear

Limitations

- Do not apply coatings to surfaces treated with the Penetrant.

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TECHNICAL DATA

Physical Properties

Appearance.....	clear to cloudy liquid
Odor	none
Volatile Organic Compounds.....	none
Cleanup	water
Toxicity	none
Shelf life.....	indefinite
Freeze Temperature.....	32°F

GENERAL INFORMATION

Surface Preparation

Concrete Densifier must have access to the concrete and be able to penetrate the surface. All coatings, adhesives, oil and other contaminants must be removed. This may involve sanding, diamond grinding or mechanical scrubbing. Broom finished or lightly steel trowelled concrete can be prepared by detergent scrubbing with a floor machine using a nylo-grit brush. Scrub the surface thoroughly and do not allow the cleaning solution to dry on the surface. Rinse thoroughly with water to remove all detergent residues. Tightly steel trowelled concrete must be prepared by diamond grinding or light shot blasting to open the surface and allow good penetration. Sweep and vacuum to remove dust.

Application Recommendations

The Penetrant is applied with a pump-up type sprayer or any type of conventional spray equipment. Mask adjoining areas or use a spray shield to prevent the Penetrant from contacting other surfaces. The surface should be dry. Immediately after application, a mechanic wearing rubber boots must scrub the surface aggressively with a stiff bristled broom to work the material into the pores. A floor machine with a soft bristled brush may also be used. This procedure is important to insure the best penetration into the concrete. Disperse all puddles with a broom. The coverage rate on the first coat should be approximately 200 square feet per gallon. It is important to achieve the proper coverage to obtain the desired results. Monitor your coverage as you go. Set up fans to help the first coat dry. When the first coat is visibly dry, apply a second coat at approximately 300 square feet per gallon. Coverage to some extent is determined by the porosity of the concrete. Immediately after spraying, walk onto the wet material and distribute well with a broom, looking for the more absorbent dry areas. Push additional product onto those areas.

Allow the surface to dry overnight. If any areas have a cloudy or white appearance, the Penetrant has been over-applied. Scrub well with a floor machine and a soft bristled brush to remove the residue and rinse well with water. The surface may be opened immediately for use.

Handling Precautions

Do not breathe vapors. Use appropriate respirator with green band cartridge to protect against methyl amine vapors. Avoid contact with skin; wear protective gloves. Read Material Safety Data Sheet before using.

WARRANTY INFORMATION

Sundeck Products Inc guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. SUNDECK PRODUCTS INC MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Sundeck Products Inc shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Sundeck Products Inc shall not be liable for any injury incurred in a slip and fall accident. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.

