

NP081 @ 12.5% TECHNICAL DATA (Water Repellent and Sealer)

PRODUCT DESCRIPTION: NP081 is a one component water based 12.5% sodium silicate solution designed to increase water repellency to cement or concrete substrates. The silicate also increases the strength of the concrete, increases the hardness, chemical resistance and density when the silicates react with the calcium hydroxide and reduce porosity and permeability of the concrete matrix.

BENEFITS OF USE:

Concrete sidewalks, drives or floors:

- Increases durability by improving resistance to freeze thaw effects (horizontal surfaces that bear traffic will need to be retreated more often to maintain optimum performance)
- Improves weathering and reduces efflorescence.
- Protects and fortifies concrete as it seals against moisture damage.
- Product will not discolor or stain under normal use
- Application of the NP081 will reduce dusting and increase concrete life by reducing porosity and permeability.

VOLATILE ORGANIC CONTENT:

Water based material with essentially no VOC's

COLOR:

Semi-clear to very opaque color

RECOMMENDED FILM THICKNESS:

Apply until surface is saturated without puddles

COVERAGE PER GALLON:

When the surface is fully saturated, coverage will depend on the absorptivity of the substrate resulting in about 200 square feet per gallon coverage per coat.

PACKAGING INFORMATION:

This product is available in 1 gallon, 5 gallon and 55 gallon containers.

(Approximately 9.15 pounds/gallon)

SHELF LIFE:

1 year in unopened containers when stored between 50-80 degrees F.

FINISH CHARACTERISTICS:

This product does not change the overall appearance of the substrate. After the material is applied/rinsed and allowed to dry for 24 hours, it will not be readily apparent that the application has occurred, except the concrete will be fortified.

ABRASION RESISTANCE:

The application of this product will increase the abrasion resistance of the concrete substrate. Results will vary according to substrate type.

ADHESION:

Because this material becomes an integral part of the surface that is coated and does not form an impermeable barrier, delaminations do not occur.

DOT CLASSIFICATION:

"Not Regulated"

VISCOSITY:

Less than 100 cps

PRIMER:

None required. Multiple coats of this product are recommended. Typical applications are usually performed with two or three coats

TOPCOAT:

None required. Multiple coats of this product are compatible (see information under primer).

CURE SCHEDULE (70 Degrees F)

After rinsing the final application, allow the material to dry for a 24 hour period of time to obtain the maximum benefits of the application. This allows the material to react and become an integral part of the substrate.

Application Temperature: 55-90°F.

SUBSTRATES FOR SILICATE TREATMENT INCLUDE:

Type of Material:	
Concrete Walls	Runways
Storage Tanks	Warehouse Floors
Building Blocks	Industrial Plants
Roadways	Food Processing Plants
Driveways	Hospitals
When properly used, this product can reduce water absorption, increase abrasion resistance, increase chemical resistance and increase hardness and density	

LIMITATIONS:

The surface should be clean and dry before applying. Prevent or remove all overspray immediately from all glass, plastic or metal surfaces as this product can etch the surface. Under certain conditions, a white precipitate may be deposited as the water repellent dries. See application procedures on the reverse side for more details. Always apply a test patch to determine the suitability before using. After each application, the surface should be rinsed before the silicate solution is allowed to dry and then allow the floor to dry before the next application. Physical properties listed on this technical data sheet are typical values and not specifications. See reverse side for application instructions. See reverse side for limitations of our liability and warranty.

MIXING AND APPLICATION INSTRUCTIONS: NP081 @ 12.5% Water Repellent and Sealer

PRODUCT STORAGE: Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 50 and 80 degree F. Keep from freezing.

SURFACE PREPARATION: All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free application. First sweep the floor after the floor is swept, the floor should be wetted and scrubbed with a cleaning compound. After the floor is cleaned properly, rinse the floor and allow the floor to completely dry before application of the silicate solution. The concrete should be properly cured for a minimum of seven days prior to application. Silicate solutions should not be applied to any surface that has already been treated with compounds that might prevent the penetration of the silicate. Since silicates may be less effective if there is no free lime near the surface, carbonated concrete should be abraded.

PRODUCT APPLICATION: Stir material before using. Make sure the surface is clean and dry. Apply the silicate solution with a brush, roller, sprayer, squeegee or scrubbing machine for several minutes while working the solution into the substrate. On vertical surfaces, work from the top down. When applying the material, always maintain a wet edge as this will reduce any chance of water spotting. When applying, this product is caustic and can kill vegetation, stain or etch glass, aluminum, metal and plastic. If contamination does occur, rinse it off with water immediately. To prevent a white precipitate from forming, after the silicate material is thoroughly worked into the surface, rinse off the silicate solution from the surface before it has had time to dry. Normally two to three applications are performed to properly treat the surface. Read the Recoat or Topcoat section for multiple application guidelines. Coverage will vary dependent on concrete porosity but a typical application will yield about 200 square feet per gallon. If capillary water is traveling toward the treated face, most of it will be stopped at the depth to which the silicate solution has penetrated. At this point it will evaporate, passing through the treated area as water vapor. This normally will present no problem. However, if the capillary water source contains soluble salts, they will be deposited at this point within the substrate where this water evaporates. In essence, this reduces visible efflorescence but there is this danger: If capillary water deposits excessive amounts of soluble salts, their crystalline growth can develop sufficient pressure resulting in spalling. Spalling may also result from substantial pressures of water freezing behind the face of the surface before evaporation can occur. These conditions both develop from outside sources of water. Although the material will strengthen the substrate, outside sources of water may cause problems if the hydrostatic pressure is sufficiently great.

RECOAT OR TOPCOATING: Normally two to three coats are required to properly treat the surface. However, after each application followed by rinsing, the surface should be allowed to dry before the second and/or third application is started. Ordinarily, properly treated concrete may be coated without difficulty. However, there should not be no silicate residue on the surface prior to coating. It is always preferable to apply a test patch to determine suitability.

CLEANUP: Use any suitable detergent and water.

FLOOR CLEANING: Caution! Some 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 floor to light traffic and non-harsh chemicals 24 hours has passed. Keep the floor 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.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

*We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. **NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT.** We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may **CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.***

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