

TDS & Application Guide

Description

Surface Prep EXT™ - with InnerCrete™ Technology, is a non-muriatic / non-HCl based concrete profiling and surface preparation product designed to purge the insoluble salts and contaminants from the top 4mm of concrete (paste layer) to achieve the desired profile and clean the surface. Surface Prep EXT™ is formulated to create a strong, porous Concrete Surface Profile (CSP) of a 1-4 without damaging the surface, unlike mechanical methods that can result in impacted salts, micro fractures, and weaken the CSH at the surface. Surface Prep EXT™ will buffer down the pH of high alkalinity concrete to an adequate, more healthy pH level. The combined reduction of pH and surface cleansing of the bondable surface creates the ideal substrate condition for cementitious self-leveling & patch materials, MoistureShield moisture barrier, and many coatings and adhesives. When **Surface Prep EXT™** is followed by an application of **MoistureShield™** mitigation system we can provide a simplified two-step process for permanent in-situ slab moisture & pH solution that protects and continues to improve over time.

Surface Prep EXT Features & Benefits

- Fume free and low odor
- Muriatic / HCl free formulation
- Zero VOC's
- Eliminates substrate damage and impact caused by mechanical methods
- Ease of application- apply with handheld pump sprayer or roller
- No special equipment required
- Water cleanup
- Improves project efficiency over mechanical means
- Concrete Profile (CSP 1-4) depending on dwell time
- Concrete Cleaner – cleans and purges concrete surface
- Self-Neutralizing - will not damage concrete
- Biodegradable

Applications

- Surface preparation and cleaning for old and new concrete floors to achieve profiles of CSP 1-4
- Use as a concrete cleaning product for damaged surfaces
- Buffers high-alkalinity concrete to lower, healthier concrete pH levels
- Specialty formulation for use on vertical surfaces and walls. (Contact S3 for details)

Product Details

Packaging	US 4-gallon pail (18.9L) or US 55-gallon Drum (170.1L) drum
Color	Clear Yellowish Liquid
VOC	Zero
Shelf Life	24 months in unopened containers; Do Not Allow Material to Freeze
Theoretical Coverage	225-300 SF per gallon
Application Temperature	Should be applied between 40°F and 90°F

Concrete Preparation

Note that in general ALL substrates must be clean, sound, and have minimum 250 psi tensile bond strength when tested per ASTM D4541. Be sure concrete surface is free from oil, grease, paint, coatings or any contaminants that would act to prohibit penetration. This product **will work** with concrete that has hardeners, curing agents, or densifiers. Prior to installation, apply material on a sample area to determine desired profile as related to dwell time, and if a second application coat may be required. Following proper removal of Surface Prep EXT confirm adequate porosity is achieved using water drop test method as described in ASTM E 331. Porosity of the concrete slab will affect absorption and promote reliable bonding of MoistureShield™ moisture barrier, self-leveling & feathered cement patches, MRP barrier primer, epoxies, and floor adhesives.

NEW CONCRETE SYSTEM SOLUTION: S3 Surface Prep EXT™ is also designed to go direct to GREEN concrete that has been steel troweled or has a tight finish, apply sample area wait one hour and remove to determine appropriate dwell time. To provide a in-situ moisture barrier, apply S3 MoistureShield™ or for a coating apply S3 MRP once S3 Surface Prep EXT has been removed and is dry.

Application

Surface Prep EXT™ - should be applied with a low-pressure sprayer using a cone tip, being careful not to atomize the liquid, or allow it to become airborne. Work spray head from side to side to ensure complete and liberal surface coverage. Surfaces should be evenly and well saturated to achieve a uniform profiling of the surface. Application can also be accomplished using a floor squeegee or paint roller, the same requirements for liberal and even coverage apply. Once Surface Prep EXT™ is applied, agitate the coated surface with a stiff bristle(non-metal) brush which will increase surface profiling performance and assist with stain removal.

CAUTION: Product should not be allowed to dry out within the profiling dwell period. If this occurs, apply more Surface Prep EXT™ to re-wet the surface, and continue dwell period.

ACTIVATION PERIOD / DWELL TIME:

Dwell time can be between 15 minutes (for surface cleaning) to 4 hours (for profiling), depending on desired result. Estimated time to achieve a CSP of 2-3 is 2 hours. Installing test patches will help determine the adequate dwell time for each project, as grades and ages of concrete can affect the reaction times. Requirements for heavy (CSP 3-4) surface profiling/preparation could require longer dwell times or additional application.

REMOVAL PROCEDURE:

For large open areas with drains, pressure wash thoroughly to remove all Surface Prep EXT™ residues, and flush to drains. Note, this product is fully biodegradable, but always seek advice on local authority requirements before disposal. For applications without a drain, pre-wet with water, agitate to loosen Surface Prep EXT™ from the concrete surface and use a wet/dry vacuum system. This process can be accomplished effectively and efficiently with a flooring auto scrubber.

CAUTION: Inadequate removal of Surface Prep EXT™ will interfere with the application or adhesion of S3 MoistureShield™, secondary treatments, coatings, or adhesives. **(material not removed properly will look like slow drying, shiny surface areas. Ensure all edges of crack suppression joints or walls are pre-wet and scrubbed)**

EXAMPLES OF IMPROPER REMOVAL:



STORAGE & HANDLING

Surface Prep EXT™ Protect from freezing. All containers must be sealed properly when stored. All containers must be secured during transport to prevent damage. Lids, caps and closures must be tightened during transport and storage to avoid spillage. Surface Prep EXT™ comes with a vented lid, so if exposed to high heat for long periods of time this will allow the excess vapor created to dissipate.

DISPOSAL

Surface Prep EXT™ is fully biodegradable. Neutralizing and dilution with water will be required to meet local waste or sewage disposal requirements. Seek advice on local authority requirements before disposal. Spills should be contained and disposed of under the same requirements. Do not mix with other materials.

HEALTH & SAFETY:

Refer to the warning statements on the product container to ensure proper handling and application. Avoid contact with eyes and skin. Wash with water and thoroughly rinse eyes if contact occurs. Wear eye protection and clothing suitable for prolonged contact and exposure to chemicals. Use in areas with adequate ventilation. Product is harmful if swallowed.

Technical Assistance

If you have any questions regarding this product, please call 800-933-7520 for further information.

SAFETY PRECAUTIONS

HEALTH CONSIDERATIONS

As with all epoxies, good hygienic habits must be observed, and the wearing of protective clothing and gloves is advised. Before using any S3 Surface Solutions, LLC. product, please read and follow the product Safety Data Sheet (SDS). Use this product only as directed. Keep out of the reach of Children.

FOR YOUR PROTECTION

The data, statements and recommendations set forth in this product information sheet are based on research and development work which has been carefully conducted by S3 Surface Solutions, LLC. and we believe such data, statements and recommendations will serve as reliable guidelines. This product is subject to numerous uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any use. Users are advised to test the product in advance to make certain it is suitable for their installation conditions and uses.

DISCLAIMER

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WARRANTY

The data, statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by us, and we believe such data, statements and recommendations will serve as reliable guidelines. However, this product is subject to numerous uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

WARRANTY - All products manufactured by us are warranted to be first class material and free from defects in material and workmanship. Liability under this warranty is limited to the net purchase price of any such products proven defective, or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. **WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL. THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES.**