Sure-Tough ST 7040

Applied Polymer Solutions, LLC

PRODUCT PROFILE

GENERIC DESCRIPTION **CONCRETE CONDITIONER WITH STAIN GUARD -** a one component water based ultra small particle size self-crosslinking hydrophobic organic polymer and silane/siloxane designed specifically for use in the grind and polish of concrete/cement as a surface conditioner and stain guard to be applied before the final polishing step to increase long term performance, gloss and stain resistance.

BENEFITS OF USE

* Increases durability and stain resistance and abrasion resistance.
* Improves weathering, densifies and reduces efflorescence.
* Protects and fortifies concrete as it seals against moisture damage.
* Application will reduce dusting and increase concrete life.
* Reduces water absorption into the substrate.

COLORS White opaque emulsion

CHARACTERISTS/FINISHES

SURFACE The product may slightly darken the surface. The overall finish characteristics are determined by the polishing diamond grit size and concrete composition.

PRIMERS Normally, a concrete densifier is used in the early grind and polish stages to increase the density and harden the concrete. We recommend the use of the ST 7036. The ST 7036 was designed to densify the concrete while allowing subsequent products such as the ST 7040 to thoroughly penetrate the surface.

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

TECHNICAL SPECIFICATIONS

VOC 50 grams per liter

RECOMMENDED THICKNESS Apply until surface is saturated without puddles. Can be applied by any suitable method such as spraying or mopping etc.

ABRASION RESISTANCE The application of this product will increase the abrasion resistance of most substrates. Results will vary according to substrate type.

ADHESION Because this material is applied prior to the final grind polishing step and is developed to deeply penetrate into the pores of the concrete, it does not remain as a coating after the final polishing step so delaminations do not occur.

PACKAGING

Size	Part A	Coverage (1,604/WFT) x gallons
1 gallon kit	1 gallon	When the surface is fully saturated, coverage will depend on the absorptivity of the substrate resulting in 800 to 1200 square feet per gallon coverage.
5 gallon kit	5 gallon	
50 gallon kit	50 gallon	

STORAGE TEMP 65°F - 85F° (18°C - 30°C) in a dry area. Avoid excessive heat and freezing.

SHELF LIFE 1 year in an unopened container

TEST AREA Concrete substrates vary from geographical regions throughout the country and the actual condition of the concrete can provide varying results. Results can also vary from floor machine weights, RPM speed and the sequence of polishing stages and diamond grit sizes, therefore, test a minimum 4 ft. by 4 ft. area on each type of concrete to determine suitability before undertaking the entire project.

Published technical data and instructions may be modified at any time without prior notice. Please contact your Applied Polymer Solutions representative with any questions.

Sure-Tough ST 7040

Applied Polymer Solutions, LLC

SURFACE PREPARATION

SURFACE

All dirt, oil, dust, foreign contaminants and sealers must be removed to assure a trouble free application. This product will work on a wide variety of substrates but a test patch should be placed prior to undertaking the application. The surface to be treated should be dry and should remain dry for a twenty-four hour period after the application. Prepare surface by: abrasive blasting, acid etching, solvent degreasing, caustic soda scrubbing, or high-pressure washing. If strong acidic or alkaline cleaning agents are used, neutralize the surface and remove all residue before application. Always apply a test patch to insure product suitability.

APPLICATION

APPLICATION

Stir material before using. This product is intended to be used prior to the final polishing step when diamond grind/polishing concrete substrates. Normally, a densifier (silicates) is used in the early stages of the grind and polish sequence and prior to using this product. An example of a polishing sequence would be: 80 grit grind, silicate densifier, 150 grit grind, 300 grit grind, 800 grit grind, apply ST 7040, 1500 grit grind. The overall process is dependent on equipment used, the equipment RPM and weight as well as the desired gloss after the final polishing step. For increased shine, even finer and finer grit sizes can be employed. Always apply a test area to determine the gloss and finish characteristics prior to commencing the entire job. The ST 7040 can be applied by a typical garden sprayer to wet the surface without any puddles followed by a lint free finish mop to assure a thin and even coat. When using the lint free finish mop, because the product dries fairly quickly, make sure that the finish mop is used prior to the coating tacking off or becoming partially dry. Do not allow overspray to contact equipment or other surfaces. Typical application coverage ranges from 800 to 1200 square feet per gallon. When applied correctly, no excess material should remain on the surface and the surface will look damp without free liquids. After the material is applied, allow the material to completely dry before completing the final polishing step. Keep floor completely dry for at least 24 hours after the final polishing step is performed. Product is intended for indoor applications on concrete with a functional vapor barrier

CONCRETE PRECAUTIONS

Since ST 7040 does not totally seal pores, water can still evaporate from the underlying surface. However, if capillary water is traveling toward the treated face, some of it will be stopped at the depth to which the ST 7040 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 efforescence 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. Concerning positive side water absorption, applications of this material will reduce positive side absorption and improve the capability of the substrate to resist spalling. Although the material will strengthen the substrate, outside sources of water may cause problems if the hydrostatic pressure is sufficiently great.

RECOAT/TOPCOAT

Normally one coat before the final polishing step is all that is required.

CLEAN UP

Citrus based cleaners or any suitable detergent and water.

FLOOR CLEANING

Caution! 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.

LIMITATIONS

The surface should be dry prior to the application of this product.
This product is intended for interior use only.
Always apply a test patch to determine the suitability before using.
Allow to completely dry before polishing.
Product may slightly darken the substrate.
Stain resistance and water repellency may not fully develop for 2-4 days.
Remove spills as soon as possible to limit staining possibilities.
Physical properties listed on this technical data sheet are typical values and not specifications.

Sure-Tough ST 7040

Applied Polymer Solutions, LLC

LIMITATIONS

Warranty & Limitations of Seller's Liability: Applied Polymer Solutions, LLC warrants only that our materials represented herein meet the formulation standards or Applied Polymer Solutions, LLC.

We warrant that our products are manufactured to the specifications and that the information stated here is accurate to the best of our knowledge. Information supplied about our products is not a representation or a warranty. It is supplied on the condition that the buyer shall conduct their own tests to determine the suitability of our product for their particular purpose. 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 THAT WILL BE OBTAINED FROM ITS USE. N0 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 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 product delivery means acceptance of 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 DIRECTIONS AND PRECAUTIONS ACCORDINGLY.**

Applied Polymer Solutions, LLC

507 Five Leaf Lane, Waxhaw, NC 28173 866-592-9858 http://applied-polymer-solutions.com