

Sure-Tough ST 7020

APPLIED POLYMER SOLUTIONS, LLC

PRODUCT PROFILE

GENERIC DESCRIPTION **DENSIFYING/SATURANT** - is a one component water based multifunctional self-crosslinking water soluble alkylalkoxy silane and siloxane designed to treat a wide variety of mineral substrates including architectural concrete, concrete block, splitface block, pavers, stucco, porous and dense brick, clay tile, exposed aggregate concrete, sandstone, and slate.

- BENEFITS OF USE**
- * Provides excellent water repellency to reduce cracking, spalling, freeze-thaw damage, chemical degradation, biological growth, efflorescence, and dirt pickup, thereby lengthening substrate life and reducing maintenance costs.
 - * Provides excellent beading for improved aesthetics
 - * Low VOC emissions on curing. EPA compliant.
 - * Formulated to minimize darkening effects thus not changing substrates appearance (20% strength or less.)
 - * Good performance on both neutral and highly alkaline surfaces providing application field flexibility.
 - * Physically and chemically bonds to substrate
 - * Product is UV stable and will not discolor
 - * Product is resistant to biological degradation for longer service life.
 - * Coatings are vapor permeable to resist cracking, peeling, blistering and allows for carbonation to continue after the coatings application. This allows for lengthened substrate life and for greater substrate structural strength over time.

COLORS White opaque emulsion - will not change the color of the concrete.

CHARACTERISTICS/FINISHES

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

PRIMERS 2 coats recommended

TOPCOATS/FINISHES 2 coats recommended

TECHNICAL SPECIFICATIONS

VOC Less than 280g/l, at 40% and 140g/l at 20% strength.

RECOMMENDED THICKNESS Apply until surface is saturated without puddles.

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 becomes an integral part of the surface that is coated and does not form an impermeable barrier, 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 100 to 400 square feet per gallon coverage.
	5 gallon kit	5 gallon	
	55 gallon kit	55 gallon	

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

SHELF LIFE 6 months in an unopened container

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

© January 2008, by Applied Polymer Solutions, LLC.

Sure-Tough ST 7020

APPLIED POLYMER SOLUTIONS, LLC

TECHNICAL SPECIFICATIONS (CONTINUED)

PERFORMANCE OF ST 7020

WATER REPELLENCY	passes ASTM E514
WATER REPELLENCY	NCHRP 244 (86.75)
WATER REPELLENCY (after 1 month)	NCHRP 244 (81.88)
WATER REPELLENCY (after 5 freeze-thaws)	NCHRP 244 (85.0)
UNALTERED APPEARANCE (Delta E/5% soln.)	1.08/1
REDUCTION OF Cl-ion % effectiveness	>80.0
SCALING	ASTM C672 (highest rating of 0)

COVERAGE RATES & DILUTION:

Substrate	Coverage rates	dilution ratio recommendation	
	Sq. ft./gallon	%	ratio
Architectural concrete	80	6.6	5:1
Concrete block	80	6.6	5:1
Splitface block	125	10.0	3:1
Concrete pavers	40	3.3	10:1
Stucco	125	10.0	3:1
Porous brick	150	10.0	3:1
Dense brick	350	20.0	1:1
Clay tile	75	6.6	5:1
Exposed aggregate concrete	325	20.0	1:1
Sandstone	125	10.0	3:1
Slate	450	40.0	0:1

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

MIXING Stir material before using.

THICKNESS Stir material before using. Apply material without thinning when at a 20% concentration or dilute with water when using the 40% concentration according to the required concentration level necessary. Apply material with a brush, roller, or spraying equipment. Apply the treatment to the surface until it is saturated without puddles. Typical application rates will be about 125 square feet per gallon. Apply two coats using a wet-on-wet procedure to ensure complete coverage. Maximum water repellency is achieved in 72 hours depending on environmental conditions. Beading generally improves over time. Do not use for below grade applications or where water pressure is from interior walls. Do not apply to plastic or foam substrates. Penetrating sealer will not prevent water passage through unsound or cracked surfaces. Protect surrounding areas from overspray or splatter.

RECOAT/TOPCOAT Normally one coat is all that is required. It is best to make a second pass when required only while the substrate is still wet. Avoid overlapping wet to dry as this can cause water spotting.

CLEAN UP Citrus based cleaners or any suitable detergent and water.

Sure-Tough ST 7020

APPLIED POLYMER SOLUTIONS, LLC

LIMITATIONS

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.

* Substrate temperature must be 5 degrees F above dew point.

*This product is not intended for use as a decorative coating or where color stability or visual appearance is of any significant importance. Its sole purpose is as a protective coating.

*If a topcoat of a different color is to be used, multiple coats will be necessary to prevent bleed-through (discoloration)

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. 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 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>