

TECHNICAL BULLETIN

Kemiko Rocky Mountain
dba The Ader Image
5326 Tennyson St
Denver, CO 80212
Phone: (303) 286-8111
Fax: (303) 286-8113
Web: www.kemiko-rockymtn.com • E-Mail: info@kemiko-rockymtn.com

STA-CRETE 2700 SERIES *Waterborne Aliphatic Polyurethane*

Description

STA-CRETE 2700 SERIES Aliphatic Polyurethane's are waterborne, universal, high solids, HDI cured two component products that offers 0-VOC, UV resistance, good chemical resistance, excellent abrasion resistance, is user friendly, and cures to a very durable film. STA-CRETE 2700 is also supplied in clear self-leveling formulation and has a temporary light amber cast when subjected to exterior atmospheric exposure.

Applications

STA-CRETE 2700 SERIES is applied to properly prepared concrete, plaster, wood, FRP, GFRC, metals and utilized as a resilient protective finish coat over STA-CRETE water base epoxies for optimum corrosion resistance. Typical applications include hospital walls and floors, commercial cement floors, facades, steel and concrete storage tank exteriors, steel and concrete bridges, pump equipment, and many other surfaces requiring abrasion resistance, graffiti resistance, color retention and chemical resistance.

Performance

VOC – 0 g/l Meets Final SCAQMD Rule 1113 (2008)

Pencil Hardness – 4H ASTM D-3363

Adhesion – Excellent >1,000 lbs. PSI ASTM D-4541

Chemical Resistance – *Splash & Spillage of Aromatic Hydrocarbons, Ketones, Dilute Organic Acids, Alkalis, Spray Paint, Salt Spray.*

Excellent Leveling & Flow – *Brush, Roll & Spray Applications*

Weathering – 90% Gloss Retention @1500 Hours ASTM G-53

Impact Resistance - >175 in./lbs. ASTM D-2794

O-T Bend Adhesion – Pass ASTM D-4145-90

<u>Physical Characteristics</u>	<u>Clear</u>	<u>Pigmented</u>
Volume Solids:	75%	77%
Weight Per Gallon:	9.2 lbs.	10.0 lbs.
Packaging:	1.25-gallon & 5-gallon kits	1.50-gallon & 5-gallon kits
Flash Point:	>200°F. (Non-Flammable)	
Gloss:	High Gloss – clear and pigmented	
Colors:	White, Mid-Tone White, Clear & Colors (See Color Charts)	
Mix Ratio:	2:3 (A:B) by volume	1:2 (A:B) by volume
Pot Life:	@70°F., 50% RH: 1.5-hours	
Dry Time:	@70°F. 50% RH, 5-hours to touch, foot traffic 14-hours. Heavy traffic in 24-hours, Full cure in 72-hours (chemical resist.)	
Recoat Interval:	50°F – min. 12-hours, max. 72-hours. 70°F – min. 6-hours, max 24-hours. 90°F – min. 3-hours, max. 12-hours.	
Film Thickness:	4-5 mils wet to achieve 2.5-3.5 mils dry film thickness DO NOT EXCEED 6 MILS DFT - AIR ENTRAPMENT AND FOAMING MAY OCCUR	
Coverage:	300-400 square feet per gallon – per coat	
Thinning:	Add 0%-5% water required for spray. Add 5%-10% water for brush and roll.	
Primers:	Self-priming or Sta-Crete 1207, 1600, 3700, ZRC.	

Surface Preparation

Concrete – All visible oil, grease, sludge, and any other contaminants shall be removed prior to any abrasive surface preparation, acid etching and water washing. Surface shall be cured, dry and free from alkali stain and laitance. Blas-Trac or other approved mechanical method to achieve a 60-80 grit profile for long term adhesion and non-slip surface on floors.

Metals – All visible oil, grease, sludge, and any other contaminants shall be removed prior to any abrasive surface preparation. Prepare carbon steel in accordance with SSPC-SP6 and achieve 1-2 mil surface profile. Small surfaces may be prepared in accordance with SSPC-SP2 and SSPC-SP3 followed by SSPC-SP1.

Wood – Surface must be completely dry, free of any contaminants, mildew and organic matter.

Existing Coatings – High-pressure wash off any chalk, remove all visible grease, oil, dirt or any other deleterious matter. Spot prime surfaces prior to full application coat.

Application Methods

MIXING – Mix “B” component until a homogeneous mixture is obtained. Next, pour “A” component into “B” component and mix slowly (500-1,000 rpm) using a mechanical “jiffy mixer” for 1-2 minutes. Allow 5-minute induction period before any reducing or application. Reduce with clean fresh water 5%-10% by volume depending on application requirements. **Brush** – Use top-quality nylon bristle brush for best film properties. **Roller** – Lambswool or similar cover with phenolic core, ¼ - ½ inch nap thickness.

Spray – Conventional – Use galvanized or other alloy metal pressure tanks with dual regulation and standard duty agitation, Binks ‘2001’ spray gun, #66 fluid nozzle, #66SD air cap, #565 fluid needle, Teflon fluid packing, 3/8” or larger solvent resistant fluid line and ¼” or larger air supply line. Adjust air and material pressure to the lowest possible setting that allows proper atomization. Airless Spray – Use Graco 33:1 airless equipment or equal designed for spraying high solids coatings. Use Binks ‘Airless 1’ spray gun with reverse-a-clean .017-.019 spray tips, 3/8” or larger solvent resistant fluid line with ¼” or larger air supply line. Adjust pump pressure to the lowest possible setting that allows proper atomization. Acetone and PCBTF can be used for cleaning equipment.

Environment – Apply between 50°F. – 100°F. and 5°F. above dew point.

Safety – Areas such as pool decks, sloped driveways, or other surfaces subjected to water may become slippery if coated with STA-CRETE SERIES 2700 Aliphatic Urethane. If you must seal these surfaces, keep the sealer film build-up to a minimum. In severe cases a non-slip material such as fine glass beads, washed silica sand and other aggregates may be broadcasted between coating applications. CONTAINS POLYOL AND ISOCYANATE RESINS! DO NOT USE IF YOU HAVE AN ADVERSE REACTION TO THESE CHEMICALS!

Contact KEMIKO for any additional application information.

WARRANTY The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser’s use of this product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product, which is proved to be defective. Any claim of defective product must be received in writing within one (1) year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.