



Concrete  
Coatings &  
Floor Systems

**TECHNICAL BULLETIN**  
**Kemiko® (Sta Crete) SS2700**  
**Waterborne Aliphatic Polyurethane**

**Description**

Kemiko SS2700 Aliphatic Polyurethane is a user friendly waterborne, universal, high solids, HDI cured two component product offering very good UV and chemical resistance, excellent abrasion resistance, and cures to a very durable film. Kemiko SS2700 also supplied in clear, may exhibit a temporary light amber cast when subjected to exterior atmospheric exposure.

**Applications**

Kemiko SS2700 may be applied to properly prepared concrete, plaster, wood, FRP, GFRC, metals and utilized as a resilient protective finish coat over Kemiko water base epoxies and 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.

According to United States Department of Agriculture guidelines, this coating has been determined to be chemically acceptable for application to structural surfaces where there is a possibility of incidental food contact in official establishments operating under the Federal Meat and Poultry Products Inspection Program.

**Physical Characteristics**

	Clear	Pigmented
Volume Solids	75%	77%
Packaging	1.25 gal	1.50 gal
Flash Point	>200°F (non-flammable)	
Gloss	High gloss and Satin	High gloss
Mix Ratio	2:3 (A:B) by volume	1:2 (A:B) by volume
VOC	Max VOC 50 g/l	
Pot Life	@ 70°F 1.5 hours	
Dry Time	@ 70°F 50% RH 5 hrs to touch; Foot traffic in 14 hrs; Heavy traffic in 24 hrs; Full cure in 7 days (chemical resist.)	
Recoat Intervals	50°F - min. 12 hrs, max. 72 hrs 70°F - min. 6 hrs, max 24 hrs 90°F - min. 3 hrs, max. 12 hrs	
Film Thickness	4-5 mils wet to achieve 3-4 mils dry film thickness. DO NOT EXCEED 6 MILS WET FILM THICKNESS AIR ENTRAPMENT AND FOAMING MAY OCCUR	
Coverage	300-400 ft <sup>2</sup> /gallon/coat	
Thinning	10%-15% for brush and roll	
Primers	Self priming, Kemiko SS1600, SS3500, SS3700, SS3400, SS1202 or SS1202 UVR	
Colors	White	

**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. Blastrac or other approved mechanical method to achieve a 60-80 grit profile for long term adhesion and non-slip surface on floors.



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**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 2 minutes. Allow 10-minute induction period before any reducing or application. Reduce with clean fresh water up to a maximum of 10% by volume depending on application requirements.

**Brush** — Use top quality bristle brush for best film properties.

**Roller** — Lambswool or similar cover with phenolic core, ¼ - ½ inch nap thickness.

**NOTE: Keep wet films thin. Multiple thin coats are recommended over fewer heavy coats. Do not allow material to puddle or accumulate in divots or depressions as foaming may occur. The coating may yellow out or break down when used as a topcoat for use with manufacturers’ tires that contain plasticizers.**

To ensure color consistency when using multiple batches of the same color, “boxing” is recommended.

#### 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 reverse-a-clean .017-.019 spray tips, 3/8” or larger solvent resistant fluid line. Adjust pump pressure to the lowest possible setting that allows proper atomization. Acetone and PCBTF may be used for cleaning equipment.

**Environment** — Apply between 60°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 KEMIKO SS2700 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 EPMAR 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.



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