Product Data Sheet Edition 7.7.2010 Sikafloor® Pronto 13

# Sikafloor® Pronto 13

# Methyl Methacrylate Primer

#### Description

Sikafloor Pronto 13 is a two component, reactive acrylic primer, based on Methyl Methacrylate (MMA) chemistry. It's low viscosity and excellent strength allow it to penetrate and reinforce concrete substrates. Applying this fast-curing primer to properly prepared concrete is the first step to the installation of all Sikafloor Pronto MMA based flooring systems.

#### Where to Use

- Automotive Dealerships
- Food & Beverage Processing
- Manufacturing
- Animal Clinics
- Pharmaceutical Facilities
- Supermarkets
- Coolers and Freezers
- Retail Sales Spaces
- Sports Facilities, Concourses, Locker rooms, Concessions

### **Advantages**

- Low viscosity, penetrating
- Fast cure time under 1 hour
- 100% Reactive
- UV Resistant
- Repairs seamlessly

# Chemical Resistance

Before applying for protection against specific chemical environments, consult Sikafloor Pronto Chemical Resistance Guide or contact Sika Technical Services at 800-933-SIKA (7452).

Typical Data

Coverage 100 sq. ft. per gallon @ 16 wet mils

**Dry Film Thickness** 16 mils (0.41mm)

Pot Life Approx. 10-15 minutes @ 75°F (23.8°C).

ThinnerNot RecommendedCure Time35 - 60 minutesRecoat Time35 - 60 minutes

Packaging: Sikafloor Pronto 13 Part R is packaged in 40.8 lb. (18.5 kg.) pails which contain 5 gallons (18.9 L) Drums 400 lb. (180 kg) which contain 49 gallons (185 L). Sikafloor Pronto Part H is packaged in a 55 lbs. (25 kg.) cardboard box.

Shelf Life: Maximum 12 months in unopened containers @ 65°F - 75°F (18.3°C - 23.8°C).

**Storage Conditions:** Sikafloor Pronto 13 should be stored in a cool, dry area out of direct sunlight. The materials should be stored between 65°F and 75°F (18.3°C - 23.8°C) for 24 hours prior to use for optimum handling properties. Do not store near open flame or an ignition source. The cans should maintain an airtight seal.

Product Conditioning: Condition product to application temperature prior to use.

Type Test	Test Method	Typical Value
Percent Reactive Resin		100%
Density, Ibs/gal	ASTM D1475	8.15 lbs./gal. (0.98kg/L)
Water Absorption	ASTM D570	0.6%
Tensile Strength	ASTM D638	3660 psi. (25.23 N/mm²))
Tensile Modulus	ASTM D638	3.9 x 10 <sup>5</sup> psi. (2689 N/mm <sup>2</sup> )



## How to Use Surface Preparation

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, curing compounds, bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by shot blasting or equivalent mechanical means. (CSP-3 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate. Whenever shot-blasting is utilized, be careful to leave concrete with a uniform texture. Over-blasting will result in reduced coverage rates of the primer and/or subsequent topcoats. It is also possible that the texture of the shot-blast pattern may show through the last coat. This is known as "tracking". The compressive strength of the concrete substrate should be at least 3500 psi (24 MPa) at 28 days and at least 250 psi (1.7 MPa) in tension at the time of application of Sikafloor Pronto 13. Refer to Sikafloor MMA Detail Drawings for specific termination, joint, and cove base details.

#### **Bond Test**

A bond test should be conducted to determine the sufficiency of the surface preparation and the bond of the primer to the substrate before application. The bond of the primer to the substrate should be greater than the tensile strength of the substrate itself. Additional preparation may be needed if only a fine laitance or small amount of concrete is attached. If there is evidence of poor bonding between the properly prepared concrete and the Sikafloor Pronto 13 primer, it may indicate that the concrete has been fortified with materials that inhibit MMA bond. Consult Sika Technical Services for further or alternate recommendations.

**Bond Test Instructions:** 1. Mix approximately 8 ounces of Sikafloor Pronto 13 with a 1/2 ounce of Sikafloor Pronto Hardener (slightly more or less depending on the substrate temperature) and mix for 30 seconds using a drill jiffy mixer (300-450 rpm).

- 2. Apply primer with a brush over an area approximately 4-6 square feet (0.5 square meters)
- 3. After 60 minutes, the primer should not be sticky and must not be able to be removed by scratching with either a knife or screwdriver.
- 4. If primer remains tacky, this may indicate the presence of a contaminate in the concrete. If additional surface preparation does not resolve the bond test issue, contact Sika Technical Services at 800-933-SIKA (7452).

### Mixing

Always pre-mix pails or drums of Sikafloor Pronto Part R products prior to pouring off into smaller mixes. Failure to do so will result in improper cure. It is important to remember that this primer has a limited pot life. Ensure that all surface preparation is complete and application equipment is in good working order before starting the mixing sequence. Sikafloor Pronto 13 must be mixed using appropriate amounts of Sikafloor Pronto Hardener using a drill (300-450 rpm.) and a jiffy mix paddle for a minimum of 60 seconds immediately before application.

#### **Sikafloor Pronto Hardener Dosing Chart**

Use the below amounts of Sikafloor Pronto Hardener per one (1) gallon of Sikafloor Pronto 13 in accordance with the temperature as shown below.

15 - 32°F (-10 - 0°C) 14-10 fl.oz. Sikafloor Pronto Hardener 32 - 50°F (0-10 °C) 10 -8 fl.oz. Sikafloor Pronto Hardener 50 - 68°F (10 -20°C) 8-6 fl.oz. Sikafloor Pronto Hardener 68- 86°F (20 - 30°C) 6-4 fl.oz. Sikafloor Pronto Hardener

The use of accurately graduated measuring containers are required to ensure correct proportioning of all components. Mixing is done in small batches using an electric drill equipped with a jiffy type mix paddle.

#### **Application**

In order to ensure optimum curing during internal applications the air must be exchanged at least seven times per hour. During application and curing use a forced fresh air supply/exhausting of fumes with appropriate equipment (explosion proof). Systems based on reactive acrylic resins exhibit a characteristic odor during application and prior to achieving full cure. Once fully cured they are odor free. All unpackaged goods should be removed from the work area during application. Do not apply in the presence of foodstuffs. Any foodstuffs, whether packaged or not, should be completely isolated from the work area during the application process and until the products are fully cured. Begin application at one end of the room by pouring entire contents of mixed material in the form of a ribbon on the surface to be coated parallel with the starting point. Cut in edges using natural bristle chip brushes. Immediately roll out material laterally across the application area using a 9" or 18" solvent resistant roller at 100 sq.ft./gallon (15 - 16 wet mils). Do not allow primer to "puddle" or "pond". Use a brush to remove excess material from joints and rough areas. Allow Sikafloor Pronto 13 to completely cure and reprime any dry spots. If the primer is absorbed by the substrate and there are visible dry spots, a second coat of Sikafloor Pronto 13 must be applied. The priming process should continue until there is a visible coat of cured primer on the concrete substrate.



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Coverage

	will depend on porosity or concrete.
Critical Recoat	Sikafloor Pronto MMA products do not have a maximum re-coat window. It is critical however
Time	that the primer remain clean and traffic be prohibited before the subsequent coating is applied.
Limitations	<ul> <li>Never apply in direct sunlight or at temperatures above 104°F (40° C) or below 30° F (-1° C).</li> <li>Constant exposure to hot water should not exceed 185°F (85° C).</li> <li>For slab on grade applications a water vapor barrier membrane should be in place.</li> <li>Maximum relative humidity: RH levels are not an issue provided surface temp is at least 5°F(3°) above the dew point and surface is clean and dry.</li> <li>Conduct quantitative anhydrous calcium chloride testing in accordance with ASTM-F1869. Maximum acceptable test result is 3 pounds per 1,000 ft² per 24 hours. Determine the surface moisture content by using an impedance moisture meter designed for use on concrete as detailed in ASTM E-1907. Acceptable test results shall be 4% by mass or less. If over, use Sikafloor EpoCem 81/82. Refer to specific Technical Data Sheets for instructions.</li> <li>Do not thin this product. Addition of thinners will slow the cure and reduce the ultimate properties of this product.</li> </ul>
Caution	COMPONENT R: DANGER: FLAMMABLE, IRRITANT, SENSITIZER. Contains Methyl Methacrylate (CAS: 80-62-6) and N,N-dimethyl-p-toluidine (CAS: 99-97-8). Keep away from heat, sparks, sunlight, electrical equipment, flame or other sources of ignition. VAPORS MAY IGNITE AND EXPLODE. DO NOT SMOKE. Use only in well ventilated areas. Open doors and windows during use. Eye/skin/respiratory irritant. May cause skin sensitization. Inhalation can result in headaches and dizziness. Harmful if swallowed. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.  COMPONENT H: DANGER: OXIDIZER, IRRITANT, SENSITIZER. Contains Peroxide, dibenzoyl (CAS: 94-36-0). Causes eye/skin irritation. May cause respiratory irritation. May cause skin sensitization. Harmful if swallowed.
First Aid	Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation – Remove to fresh air. Ingestion – Do not induce vomiting. Dilute with water. Contact physician. In all cases contact a physician immediately if symptoms persist.
Handling and	COMPONENT R: Keep away from heat, sparks, sunlight, electrical equipment or flame.
Storage	VAPORS MAY IGNITE AND EXPLODE. DO NOT SMOKE. Open doors and windows during use. Use adequate local and mechanical ventilation. Wear protective equipment (chemically resistant gloves/goggles/clothing) to prevent direct contact with skin and eyes. Use properly fitted NIOSH vapor cartridge respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing after use. Store product in tightly sealed containers in a cool, dry well ventilated area at temperatures between 65° F (18° C)and 75°F (23° C) away from ignition sources. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.  COMPONENT H: Keep products in original container. Store in cool, dry well ventilated area. keep away from material or conditions listed in conditions to avoid. Do not grind or subject peroxide to frictional heat or shock. Do not add peroxide to hot reaction mixtures. Do not transfer to rigid containers with tight or screw-on closures. Do not allow peroxide to dry out, as the material will become friction sensitive. Wear protective equipment and/or garments list for personal protective equipment. Avoid inhalation and skin and eye contact. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Dispense and transfer in an area

separate from storage area. The addition of accelerators from polymerization may result in vigorous decomposition. Store below 100° F. Do not return to original container.

100 sq.ft./gallon, (2.4m²/L), or approximately 16 mils on properly prepared concrete. Coverages

will depend on porosity of concrete.



#### Clean Up COMPONENT R: In case of spill, eliminate all ignition and heat sources. Ventilate area. Open doors and windows. Wear chemical resistant gloves/goggles/clothing. In absence of proper ventilation use properly fitted NIOSH respirator. Confine spill, collect using noncombustible absorbent material and place in properly sealed container. Dispose of excess product in accordance with applicable local, state and federal regulations.

COMPONENT H: Evacuate area of all unnecessary personnel. Wear protective equipment and/ or garmets described in PPE if exposure conditions warrant. keep out of water sources and sewers. Carefully collect the material and transfer to polyethylene-lined disposal containers. Do not allow benzoyl peroxide to dry out; add water if necessary.

#### **Additional Info**

Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on www.sikafloorusa.com. Proper material application is the responsibility of the user. Site visits made by Sika personnel are for making technical recommendations only and not for supervising or providing quality control.

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1-800-933-SIKA NATIONWIDE Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center

Sika Corporation 201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225

Sika Canada Inc. 601 Delmar Avenue Pointe Claire Quebec H9R 4A9 Phone: 514-697-2610 Fax: 514-694-2792

Sika Mexicana S.A. de C.V. Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro Phone: 52 442 2385800 Fax: 52 442 2250537



