

## Sikafloor® 422

Two component water based urethane coating

<b>Description</b>	A water-based, high solids, two-component urethane with excellent abrasion and adhesion properties and enhanced chemical resistance.
<b>Where to Use</b>	For use as a topcoat over epoxy floor or wall base coats. Water based formulation allows for use in areas that conventional solvent based systems cannot be used.
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ High Solids/Low VOC's</li> <li>■ Water based — low odor</li> <li>■ Good UV stability</li> <li>■ Superior abrasion resistance</li> <li>■ Excellent chemical resistance</li> <li>■ Excellent graffiti resistance, anti-soiling properties</li> <li>■ High light reflectance</li> <li>■ High gloss, stippled finish</li> <li>■ Meets USDA requirements for incidental food contact</li> </ul>

### How to Use

#### Surface Preparation

Surface must be clean, sound and dry. Remove dust, laitance, grease, 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 PR-7 Flex Prime.

#### Typical Data

<b>Colors</b>	Clear. Other colors available using Sikafloor Urethane Color Additive		
<b>%Solids, by weight</b>	60% ± 1.0		
<b>VOC (g/l)</b>	ASTM D2369-07	68 g/l	
<b>Flash Point, T.C.C.</b>	150°F (65°C)		
<b>Coverage</b>	320-533 ft <sup>2</sup> /gal (29.7 - 49.2 m <sup>2</sup> /L)		
<b>Film Thickness</b>	Wet (mils/coat): 3.0 – 5.0 Dry (mils/coat): 1.8 – 3.0		
<b>Suggested # of Coats</b>	2, over primed surface		
<b>Application Method</b>	High quality 3/8" or 1/4" nap roller		
<b>Thinner</b>	NOT RECOMMENDED		
<b>Dry Time @ 75°F(23°C)</b>	Clear	Sikafloor Urethane Color Additive	
<b>Tack Free</b>	4 hours	5 hours	
<b>Light Foot Traffic</b>	24 hours	24 hours	
<b>Heavy Traffic</b>	>72 hours	>72 hours	
<b>Chemical Exposure</b>	5 days	5 days	
<b>Recoat Time @ 75°F(23°C)</b>	6–24 hours	8–24 hours	
<b>Shelf-Life</b>	6 months in unopened containers		
<b>Typical Physical Properties:</b>			
<b>Test</b>	<b>Description</b>	Clear	w/Urethane Color Additive
<b>Abrasion Resistance</b>	Taber Abrader CS-17 wheel, 1000 cycles, 1000 gm load	22-25 mg loss	25 mg loss
<b>Adhesion</b>	To concrete: Existing MCU coatings with proper preparation	Excellent	Excellent
<b>Flexibility</b>	Bent on 1/8" conical mandrel	No cracking or crazing	No cracking or crazing
<b>UV Light Resistance</b>	Q-U-V Accelerated Weather Tester	Excellent	Excellent
Above typical values based on cure @ 75°F(23°C) 50% R.H.			

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<b>Mixing</b>	<p>Premix the Sikafloor 422 Resin using a low speed drill and Jiffy mixer (300-450 rpm). Mix for two minutes, until uniform, exercising caution not to introduce air into the material.</p> <ol style="list-style-type: none"><li>1. The Part "H" Hardener must be added to the Part "R" Resin under agitation. Slowly, empty the contents of the Part "H" Hardener entirely into the can of Part "R" Resin. The Part "R" container is oversized to allow for easy mixing.</li><li>2. Mix with a very low speed jiffy mixer(300-450 rpm), until completely blended. This will take about 2 minutes. Be careful not to introduce any air bubbles while mixing.</li></ol> <p>Due to the difference in viscosity between the Part "H" Hardener and Part "R" Resin, care must be taken to ensure that both components are thoroughly mixed in order to avoid weak or partially cured spots in the coating</p>
<b>Application</b>	<ol style="list-style-type: none"><li>1. This product can be applied from a roller tray and/or by pouring directly onto the floor surface to be coated. Use a flat squeegee to spread the material and back roll using a 1/4" or 3/8" nap roller.</li><li>2. Apply as evenly as possible. To lessen bubbling of the coating, avoid excessive agitation of the liquids with the roller.</li></ol>
<b>Critical Recoat Time</b>	<p>It is important to apply subsequent coats of Sikafloor 422 within 6 (or 8 for pigmented Sikafloor 422) to 24 hours, under normal curing conditions. If this coating is allowed to cure longer than the 24 hours before subsequent recoats, screening will be necessary. The floor surface should be screened using 80-100 grit, to the effect that the gloss is removed before applying the next coat.</p>
<b>Limitations</b>	<ul style="list-style-type: none"><li>■ Minimum/Maximum substrate temperature: 60°F/85°F (15.5°C/30°C).</li><li>■ Maximum relative humidity: 85%.</li><li>■ Substrate temperature must be at least 5°F (3°C) above measured dew point.</li><li>■ Conduct quantitative anhydrous calcium chloride testing in accordance with ASTM-F1869. Maximum acceptable test result is 3 pounds per 1,000 ft<sup>2</sup> 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 or Sikafloor Vapor Block.</li><li>■ Do not use on exterior, on-grade substrates.</li><li>■ Freshly applied Sikafloor 422 should be protected from dampness, condensation and water for at least 24 hrs.</li><li>■ Do not thin this product. Addition of thinners will slow the cure and reduce the ultimate properties of this product.</li><li>■ This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the resurfacer.</li><li>■ Do not exceed 6 wet mils when applying this product. Foaming of the film will occur during cure.</li></ul>
<b>Caution</b>	<p><b>COMPONENT R: CAUTION: IRRITANT.</b> Contains Dipropylene Diglycol Dimethyl Ether (CAS: 1111109-77-4), Propylene Glycol Mono Propyl Ether (CAS: 1569-01-3), N- Butyl Alcohol (CAS: 71-36-3). May cause eye/skin/respiratory irritation. May be harmful if swallowed. Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage</p> <p><b>COMPONENT H: WARNING: IRRITANT, SENSITIZER.</b> Contains Homopolymer of 1, 6 Hexamethylene Diisocyanate (CAS: 28182-81-2). May cause eye/skin/respiratory irritation. May cause skin and respiratory sensitization. May be harmful if swallowed.</p> <p><b>Deliberate concentration of vapors 'R' &amp;/ or 'H' components for purposes of inhalation is harmful and can be fatal.</b></p>
<b>First Aid</b>	<p><b>Eyes</b> – Hold eyelids apart and flush thoroughly with water for 15 minutes. <b>Skin</b> – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. <b>Inhalation</b> – Remove to fresh air. <b>Ingestion</b> – Do not induce vomiting. Dilute with water. <b>Contact physician. In all cases contact a physician immediately if symptoms persist.</b></p>
<b>Handling and Storage</b>	<p>Wear protective equipment (gloves/safety glasses/clothing) to prevent contact with skin and eyes. Keep container closed in a cool dry place. Wash skin thoroughly with soap and water after use. Use with adequate, general and local, exhaust ventilation. In absence of adequate ventilation, use a properly fitted NIOSH respirator. Remove contaminated clothing. Launder before reuse.</p>
<b>Clean Up</b>	<p>Avoid direct contact with eyes and skin. Wearing chemical resistant goggles/gloves/clothing, collect spill. Ventilate area. In absence of adequate ventilation, use properly fitted NIOSH respirator. Sweep up spill and place in closed container. Dispose of in accordance with applicable local, state and federal environmental regulations.</p>

The Sika logo consists of the word "Sika" in a bold, italicized, sans-serif font, with a registered trademark symbol (®) to its right. The text is white and is set against a red triangular background that points downwards.

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<b>Additional Info</b>	Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on <a href="http://www.sikafloorusa.com">www.sikafloorusa.com</a> . 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. Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or Sika Technical Service.	
<b>Trouble Shooting</b>	<b>Problem Observed</b>	<b>Possible Causes</b>
	Orange Peel / Wrinkling	Product applied too heavily; Product applied over an in-compatible existing coating; Recoating too soon.
	Slow Cure	Low floor and ambient temperature; Improper mixing of components; Inadequate ventilation during application and cure; Product applied too thick.
	Roller Marks in Finish;	High floor and ambient temperatures; Product applied too thick.
	Bubbles in Finish Fisheyes / Crawling	Working product past pot life. Improper substrate cleaning; Surface contamination of oil, grease, silicone, or mold release agents, etc.
	Peeling Between Coats	Past the critical recoat time; Contamination between coats; Recoating too late.
	Grainy/Lumpy Product After Mixing	Did not follow proper mixing instructions.

**KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY**

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Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Technical Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKASHALL NOT BELIEABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKASHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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