

# PRODUCT DATA SHEET

## Sikafloor®-510 LPL

### ABRASION AND UV RESISTANT POLYASPARTIC RESIN

#### PRODUCT DESCRIPTION

Sikafloor®-510 LPL is a clear two-component, high solids, low-viscosity, high strength, fast cure, UV resistant, polyaspartic urethane coating system.

#### USES

Sikafloor®-510 LPL may only be used by experienced professionals.

Sikafloor®-510 LPL can be used as a concrete primer, binder, and sealer especially when fast cure times and UV resistance are required.

#### CHARACTERISTICS / ADVANTAGES

- Resists a very wide range of organic and inorganic acids, alkalis, amines, salts and solvents.
- Cures quickly, fast turnaround
- Extended working time over Sikafloor-510
- Durable, impermeable and seamless
- Superior mechanical resistance.
- Excellent UV resistance
- Excellent chemical resistance
- Superior aesthetic finish.
- Low maintenance.

#### PRODUCT INFORMATION

<b>Packaging</b>	Component A:	5 US gal. (18.9 L) fill in 5 gal pail
	Component B:	3.33 US gal. (12.6 L) fill in 5 gal pail
	Components A+B:	8.33 US gal. (31.53 L)
	Component A:	5 US gal. (18.9 L) fill in 5 gal pail
	Component B:	5 US gal. (18.9 L) fill in 5 gal pail
	Components A+B:	25 US gal. (94.63 L)
<b>Shelf Life</b>	1 year in original unopened container under proper storage conditions.	
<b>Storage Conditions</b>	Store dry between 40 °F (4 °C) and 90 °F (32 °C).	
<b>Color</b>	Clear or pigmented only with Sikafloor SUR-N Additive; 1 quart (1.0 L) size.	
<b>Volatile organic compound (VOC) content</b>	92 g/L	A+B combined

## TECHNICAL INFORMATION

Shore D Hardness	75	ASTM D2240 at 73°F (23°C) and 50% R.H
Abrasion Resistance	CS-17/ 1000 cycles/1000g ~50 mg loss	ASTM D4060 at 73°F (23°C) and 50% R.H
Tensile Strength	2,500 psi (17.23 MPa)	ASTM C307 at 73°F (23°C) and 50% R.H
Elongation at Break	60%	ASTM D638 at 73°F (23°C) and 50% R.H
Tensile Adhesion Strength	> 400 psi (2.7 MPa) (concrete failure)	ASTM D4541 at 73°F (23°C) and 50% R.H
Chemical Resistance	Please consult Sikafloor Technical Services.	

## APPLICATION INFORMATION

Mixing Ratio	3 : 2 by volume.		
Coverage	Smooth Finish Coating: Prime coat: 160 - 200 ft <sup>2</sup> / US gal (3.9 - 4.9 m <sup>2</sup> / L) at 8 - 10 mils (0.20 - 0.25 mm) wet film thickness (w.f.t.) Wear coat: 105 - 135 ft <sup>2</sup> / US gal (2.6 - 3.3 m <sup>2</sup> / L) at 12 - 15 mils (0.30 - 0.38 mm) wet film thickness (w.f.t.)		
Pot Life	<b>Material Temperature</b>	<b>Time</b>	
	+ 50°F (10°C)	~ 40 minutes	
	+ 68°F (20°C)	~ 30 minutes	
	+ 86°F (30°C)	~ 20 minutes	
	*Pot Life is based on clear resin, Urethane color additives can shorten the working time of Sikafloor 510 LPL.		
Cure Time	<b>Ambient &amp; Substrate Temperature</b>	<b>Foot traffic</b>	<b>Light traffic</b>
	+68°F (20°C)	4 hours	~ 8 hours
			<b>Full cure</b>
			~ 5 days
Waiting / Recoat Times	Before applying second coat of Sikafloor 510 LPL allow:		
	<b>Ambient &amp; Substrate Temperature:</b>	<b>Minimum</b>	<b>Maximum</b>
	+68°F (20°C)	90 minutes	24 hours

## BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## 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-free and contaminant-free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 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. The "shotblast" pattern may show through the last coat, known as "tracking". The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 250 psi (1.7 MPa) in tension at the time of application. For other substrates, please contact Sikafloor Technical Services.

Priming for concrete substrate is required. Prime with either Sikafloor 160, Sikafloor 161 or Sikafloor 1620. Allow the primer to cure (varies with temperature and humidity) until tack free before applying subsequent coats. Ensure that the primer is pore-free, pinhole-free and provides uniform and complete coverage over the entire substrate. When using Sikafloor 510 LPL as primer extra precaution has to be taken on the substrate preparation and on the moisture content.

### Clear Resin

Premix each Component separately. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin). Mix the combined components for at least 3 minutes using a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

### MIXING

Mixing Ratio - 3 : 2 by volume.  
For bulk packaging, when not mixing full units, each component must be pre-mixed separately to ensure product uniformity.

## APPLICATION

### Clear Resin

Premix each Component separately. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin). Mix the combined components for at least 3 minutes using a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

### Field Pigmented

If color is desired, the appropriate Sikafloor Urethane Color Additive is added to Component A at a rate of 1 quart per 2.5 mixed gallons (i.e. Components A+B) for all colors. Mix Component A and Sikafloor Urethane Color Additive for 2 minutes or until a uniform color is achieved with a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume. Empty component B (Hardener) in the correct mix ratio to Component A (Resin) and mix for additional 2 minutes. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.  
\*Urethane color additive can shorten the working time (Pot Life) of Sikafloor 510 LPL.

Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature.

### As a pigmented topcoat/sealer coat for smooth or broadcast finish:

Squeegee and back roll Sikafloor 510 LPL to provide a uniform coverage without ponding at a thickness of 10 - 15 mils (160 - 107 ft<sup>2</sup>/gal). If required, repeat this procedure for a second coat.

### As a clear topcoat for a broadcast quartz or flake system:

Squeegee and back roll Sikafloor 510 LPL to provide a uniform coverage without ponding at a thickness of 10 - 15 mils (160 - 107 ft<sup>2</sup>/gal). If required, repeat this procedure for a second coat.

## As a stand alone double broadcast quick cure decorative quartz and flake system:

**Step 1: Primer** - Apply neat coat of Sikafloor 510 LPL on a prepared substrate as a primer using a squeegee and roller without ponding at 5 - 10 mils (160 - 320 ft<sup>2</sup>/gal). Note: When using Sikafloor 510 LPL as primer extra precaution has to be taken on the substrate preparation and moisture content.

**Step 2: First Broadcast Application** - Squeegee and back roll Sikafloor 510 LPL to provide a uniform coverage without ponding at a thickness of 10 - 15 mils (160 - 107 ft<sup>2</sup>/gal). Broadcast pre-blended decorative flakes or colored quartz aggregates into the binder to saturation. Broadcast in a manner so that the flakes or colored quartz aggregates fall vertically into the binder. Broadcast to rejection. Ensure that broadcast flakes/aggregates cover entire surface. Allow broadcast system to cure sufficiently to be able to resist foot traffic without damaging the surface. Remove excess flakes/aggregates from the surface. Removal of excess flakes/aggregates is carried out by sweeping up the flakes/aggregates, followed by vacuuming, until surface is free of all loose particles and dust.

**Step 3: Second Broadcast Application** - Squeegee and back roll Sikafloor 510 LPL to provide a uniform coverage without ponding at a thickness of 10 - 15 mils (160 - 107 ft<sup>2</sup>/gal). Broadcast pre-blended decorative flakes or colored quartz aggregates into the binder to saturation. Broadcast in a manner so that aggregates fall vertically into the binder. Broadcast to rejection. Ensure that broadcast flakes/aggregates cover entire surface. Allow broadcast system to cure sufficiently to be able to resist foot traffic without damaging the surface. Remove excess flakes/aggregates from the surface. Removal of excess flakes/aggregates is carried out by sweeping up the flakes/aggregates, followed by vacuuming, until surface is free of all loose particles and dust.

**Step 4: Finish Coat** - Squeegee and back roll Sikafloor 510 LPL to provide a uniform coverage without ponding at a thickness of 10 - 15 mils (160 - 107 ft<sup>2</sup>/gal). When required, repeat this procedure for a second coat.

## OTHER RESTRICTIONS

See Legal Disclaimer.

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### Product Data Sheet

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## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com](http://usa.sika.com) or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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