

# PRODUCT DATA SHEET

## Sikadur<sup>®</sup>-51 SL

Epoxy flexible resin for sealing joints

### PRODUCT DESCRIPTION

Sikadur<sup>®</sup>-51 SL is a two component, self-leveling, 100% solids, flexible, control joint resin sealer and adhesive.

### USES

- Use to fill horizontal, non-moving, saw cut construction control joints and cracks
- Use as a flexible adhesive

### CHARACTERISTICS / ADVANTAGES

- Remains flexible
- Does not age-harden
- Prevents deterioration of joint edges
- Excellent adhesive properties.
- Conforms to ACI 302.1R (4.10-Joint Materials)
- Ideal for use with plural injection type systems
- Can be used on grades up to 15%.
- Shock absorbent and durable
- Withstands wheel traffic and heavy loads
- Use as a security sealant
- Use as a tamper resistant sealant.

### PRODUCT INFORMATION

<b>Packaging</b>	Component: A+B	4-gallon kit
<b>Color</b>	Concrete Gray	
<b>Shelf Life</b>	2 years in the original unopened package.	
<b>Storage Conditions</b>	Store dry at 40°-95°F (4°-35°C). Condition material to 65°-75° F (18°-24°C) before using.	
<b>Viscosity</b>	Comp. A:	5.800 cps
	Comp. B:	7.900 cps
	Mix A + B:	7.000 cps

### TECHNICAL INFORMATION

<b>Shore D Hardness</b>	50-55 (28 days)	ASTM D2240 73°F (23°C) and 50% R.H.
<b>Tensile Strength</b>	570 psi (3.9 MPa)	ASTM D638 at 73°F (23°C) and 50% R.H.

<b>Tensile Modulus of Elasticity</b>	2,800 psi (19.3 MPa)	ASTM D638 at 73°F (23°C) and 50% R.H.
<b>Elongation at Break</b>	90%	ASTM D638 73°F (23°C) and 50% R.H.
<b>Tensile Adhesion Strength</b>	2.5% 70 Psi (0.48 MPa) 5% 110 Psi (0.75 MPa) 10% 160 Psi (1.10 MPa)	ASTM D638 73°F (23°C) and 50% R.H.
<b>Water Absorption</b>	1.86% 7 days (24 hour immersion)	ASTM D570 at 73°F (23°C) and 50% R.H.

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	Component (A+B):	1 : 1 (by volume)
<b>Coverage</b>	102 In.ft.@ 1/8" by 1.5". deep joint per 4 gallon (A+B) kit.	
<b>Pot Life</b>	<b>Volume</b>	<b>Time</b>
	1 gallon.(3,8 L)	20 - 25 minutes
	8 fl.oz (250 ml)	40 minutes
<b>Cure Time</b>	7 to 8 hours	Tack-Free Time

### SUBSTRATE 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 removed 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/ coating and the 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 3626 psi (25 MPa) with a minimum pull off strength of 218 psi (1.5 MPa) in tension at the time of application. For other substrates, please contact Sikafloor Technical Services.

### MIXING

**Mixing Ratio:** 1:1 by volume.  
Premix each component. Pour Component A and Component B into a clean container in equal parts by volume. Mix appropriately with a low speed drill (400 to 600 rpm) for at least 3 minutes until the consistency and color are uniform. Mix only the amount that will be applied within the product's lifetime.

### APPLICATION METHOD / TOOLS

Pour the mixed Sikadur®-51 SL into the prepared joint or use low-pressure extrusion equipment.

#### Option one

Allow the material to flow slowly, settle and self-level filling entire depth. Strike-off level and remove any excess material where required, before it hardens.

#### Option Two

If applied generously, sealant will overflow out of joint. Allow material to completely harden. Apply heat with an industrial heating gun to soften cured resin. Shave Sikadur®-51 SL with a sharp razor to level with the surfaces of the concrete that define the control joint.

## LIMITATIONS

- Do not thin. Addition of solvents may prevent proper cure.
- Substrate temperature should be 40°F (4°C) minimum and rising.
- For best results, materials should be maintained between 65°-75°F (18°-24°C) during application.
- Do not apply through standing water.
- Minimum age of concrete is 28 days.
- Materials are a vapor barrier after cure.
- Concrete or masonry must be tested for water-vapor transmission prior to application.
- Not designed for use under constant immersion in water or other liquids.
- Do not use in expansion (moving) joints.
- For application in non-moving joints only.
- The ultimate performance of Sikadur®-51 SL depends upon many factors, [i.e., proper joint design, thermally stable areas (concrete slab), etc].
- Sikadur®-51 SL should be installed full depth when sealing construction/control joints
- Material should not be applied earlier than 28 days after new concrete is placed. A 60-90 day cure is recommended.
- Sikadur®-51 SL may change color over time, especially when exposed to ultraviolet rays, artificial heaters or intense lighting.
- For applications other than sealing of joints, consult Sika Technical Service prior to use.

## 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.

## OTHER RESTRICTIONS

See Legal Disclaimer.

## 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

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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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