

## PRODUCT DATA SHEET

# Sikadur<sup>®</sup>-31 SBA Slow Set

SEGMENTAL BRIDGE ADHESIVE HIGH-MODULUS, HIGH-STRENGTH, MOISTURE TOLERANT, EPOXY PASTE ADHESIVE

### PRODUCT DESCRIPTION

Sikadur<sup>®</sup>-31 SBA Slow Set is a unique high-modulus 2-component, moisture-tolerant, solvent-free, epoxy resin system available in three application temperature ranges. A unique high-modulus, structural adhesive for bonding hardened concrete to hardened concrete for segmental bridge construction. The mixed material has the consistency of paste and is a concrete gray color. It conforms to the current ASTM C-881, Type VII requirements, and ASBI guidelines.

### USES

Sikadur<sup>®</sup>-31 SBA Slow Set may only be used by experienced professionals.

- Structural bonding of post-tensioned precast concrete bridge segments
- Sealing joints between concrete segments
- Slow-set version for span-by-span erection
- Supplied in three temperature grades to meet project requirements. (For cold weather conditions, refer to separate technical data sheet on Sikadur<sup>®</sup> 31, SBA [20°-45°F].)

### CHARACTERISTICS / ADVANTAGES

- Moisture tolerant before, during and after cure
- High-modulus, high-strength, structural paste adhesive
- Range of curing times to meet assembly and strength gain requirements
- Easy to apply, non-sag paste for vertical applications
- Excellent adhesion to concrete, steel and most construction materials
- Convenient easy to mix ratios
- Color-coded components to ensure proper mixing control

### PRODUCT INFORMATION

<b>Packaging</b>	3 gal. (11 L) units
<b>Color</b>	Concrete gray
<b>Shelf Life</b>	24 months in original, unopened containers
<b>Storage Conditions</b>	Store dry at 40–95 °F (4–35 °C). Condition material to 70–75 °F (21–24 °C) before using.
<b>Consistency</b>	Non-sag paste

<b>Compressive Strength</b>		<b>SBA SS</b>	<b>SBA SS</b>	<b>SBA SS</b>	(ASTM D-695)
		<b>40–61 °F</b> <b>(4–16 °C)</b>	<b>55–75 °F</b> <b>(13–24 °C)</b>	<b>70–90 °F</b> <b>(21–32 °C)</b>	
	36 hours	1,800 psi (tbd MPa)	3,000 psi (20.7 MPa)	6,400 psi (tbd MPa)	
	72 hours	4,500 psi (31.0 MPa)	6,500 psi (44.8 MPa)	9,000 psi (62.1 MPa)	
<b>Slant Shear Strength</b>	<b>ASTM C-881 Spec.</b>	<b>SBA SS</b>	<b>SBA SS</b>	<b>SBA SS</b>	(ASTM C-882)
		<b>40–61 °F</b> <b>(4–16 °C)</b>	<b>55–75 °F</b> <b>(13–24 °C)</b>	<b>70–90 °F</b> <b>(21–32 °C)</b>	
	1000 psi	1800 psi	2000 psi	2300 psi	
<b>Heat Deflection Temperature</b>	<b>ASTM C881 Spec</b>	<b>SBA SS</b>	<b>SBA SS</b>	<b>SBA SS</b>	(ASTM D-648)
		<b>40–61 °F</b> <b>(4–16 °C)</b>	<b>55–75 °F</b> <b>(13–24 °C)</b>	<b>70–90 °F</b> <b>(21–32 °C)</b>	
	> 120 °F (49 °C)	> 122 °F (50 °C)	> 124 °F (51 °C)	> 124 °F (51 °C)	

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	<b>Product name</b>	<b>Temperature Range</b>	<b>Mix Ratio</b>		
	Slow Set (40–61 °F, 4–16 °C)	40–61 °F (4–16 °C)	2:1, A:B by volume		
	Slow Set (55–75 °F, 13–24 °C)	55–75 °F (13–24 °C)	2:1, A:B by volume		
	Slow Set (70–90 °F, 21–32 °C)	70–90 °F (21–32 °C)	2:1, A:B by volume		
<b>Coverage</b>	Approximately 12 ft <sup>2</sup> /gal. or 36 ft <sup>2</sup> ./3 gal. unit				
<b>Pot Life</b>	<b>ASTM C-881 Spec.</b>	<b>SBA SS</b>	<b>SBA SS</b>	<b>SBA SS</b>	(ASTM C-881)
		<b>40–61 °F</b> <b>(4–16 °C)</b>	<b>55–75 °F</b> <b>(13–24 °C)</b>	<b>70–90 °F</b> <b>(21–32 °C)</b>	
	-	~2 hours	~2 hours	~2 hours	
<b>Open Time</b>	<b>ASTM C-881 Spec.</b>	<b>SBA SS</b>	<b>SBA SS</b>	<b>SBA SS</b>	(ASTM C-881, contact strength after open time 8 hours)
		<b>40–61 °F</b> <b>(4–16 °C)</b>	<b>55–75 °F</b> <b>(13–24 °C)</b>	<b>70–90 °F</b> <b>(21–32 °C)</b>	
	14 days	1,500 psi (10.3 MPa)	2,500 psi (13.8 MPa)	1,500 psi (10.3 MPa)	

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

Surface must be clean and sound. It may be dry or damp, but free of standing water and frost. Remove dust, laitance, grease, curing compounds, impregnations, waxes, foreign particles, disintegrated materials and any other contaminants.

### MIXING

Pre-mix each component. Wear chemical resistant gloves and safety goggles. Mix all of Part 'A' with all of Part 'B'. Mix thoroughly for a minimum of 3 minutes with a low-speed (400–600 rpm) drill fitted with a mixing Sika

paddle until a uniform gray color is achieved. Scrape down the sides of the mixing pail and ensure there are no streaks of unmixed epoxy before applying. Mix only that quantity which can be used within its pot life.

### APPLICATION METHOD / TOOLS

Apply the neat mixed Sikadur® 31, SBA Slow Set to the concrete surface using a trowel, spatula or glove protected hand; work into surface, especially if it is damp. Spread to a thickness of 1/8" (3 mm) to one face or 1/16" (1.5 mm) on both faces, depending upon project requirements. Segments must be post-tensioned within the open time of the epoxy.

### LIMITATIONS

- Do not thin Sikadur®-31 SBA Slow Set. Solvents will prevent proper cure
- Use correct temperature range material for prevailing conditions
- Use correct setting material (normal or slow) depending on method of erection
- Not for use as an adhesive for fresh, plastic portland cement concrete or mortar
- Lower temperatures will prolong cure time. Higher temperatures will rapidly accelerate cure time
- Use of product outside of designated temperature range is not recommended
- Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure

## 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 at 1-800-424-9300, International 703-527-3887.

## 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.

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 Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL 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.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

**Sika Corporation**

201 Polito Avenue  
Lyndhurst, NJ 07071  
Phone: +1-800-933-7452  
Fax: +1-201-933-6225  
usa.sika.com

**Sika Mexicana S.A. de C.V.**

Carretera Libre Celaya Km. 8.5  
Fracc. Industrial Balvanera  
Corregidora, Queretaro  
C.P. 76920  
Phone: 52 442 2385800  
Fax: 52 442 2250537



Product Data Sheet  
Sikadur®-31 SBA Slow Set  
October 2018, Version 01.01  
020204030010000162

Sikadur-31SBASlowSet-en-US-(10-2018)-1-1.pdf

