

**Product Data Sheet**  
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Sikadur® 31, SBA, Slow  
Set (55°-75°F)

# Sikadur® 31, SBA, Slow Set (55°-75°F)

Segmental Bridge Adhesive High-modulus, high-strength, moisture tolerant, epoxy paste adhesive

<b>Description</b>	Sikadur® 31, SBASlow 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.
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>■ Structural bonding of post-tensioned precast concrete bridge segments.</li> <li>■ Sealing joints between concrete segments.</li> <li>■ Slow-set version for span-by-span erection.</li> <li>■ Supplied in three temperature grades to meet project requirements.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ Moisture tolerant before, during and after cure.</li> <li>■ High-modulus, high-strength, structural paste adhesive.</li> <li>■ Range of curing times to meet assembly and strength gain requirements.</li> <li>■ Easy to apply, non-sag paste for vertical applications.</li> <li>■ Excellent adhesion to concrete, steel and most construction materials.</li> <li>■ Convenient easy to mix ratios.</li> <li>■ Color-coded components to ensure proper mixing control.</li> </ul>
<b>Coverage</b>	Approximately 12 ft <sup>2</sup> /gal. or 36 ft <sup>2</sup> ./3 gal. unit.
<b>Packaging</b>	3 gal. units.

**Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)**

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

<b>Shelf Life</b>	2 years 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>Color</b>	Concrete gray	
<b>Consistency</b>	Non-sag paste	
<b>Product name</b>	<b>Temp. Range</b>	<b>Mix Ratio, A:B by volume</b>
Slow Set (40°-61°F)	40°-61°F (4°-16°C)	2:1
Slow Set (55°-75°F)	55°-75°F (13°-24°C)	2:1
Slow Set (70°-90°F)	70°-90°F (21°-32°C)	2:1

Property	ASTM C881 Spec.	SBA SS 40°-61°F	SBA SS 55°-75°F	SBA SS 70°-90°F
Pot Life, 1 gal., hrs (ASTM C881)	-	~ 2	~ 2	~ 2
Compressive Strength, psi (ASTM D695)				
36 hr	1000	1800	3000	6400
72 hr	2000	4500	6500	9000
Open Time (ASTM C881)				
Contact Strength after open time	8 hours	8 hours	8 hours	8 hours
14 day, psi	1000	1500	2000	1500
Bond Strength 14, psi (ASTM C882)	1000	1800	2000	2300
Heat deflection Temp., °F (ASTM D648)	120	122	124	124

**PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA 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 DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.**



## How to Use

<b>Surface Preparation</b>	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.
<b>Mixing</b>	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.
<b>Application</b>	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.
<b>Limitations</b>	<ul style="list-style-type: none"> <li>■ Do not thin Sikadur® 31, SBA Slow Set. Solvents will prevent proper cure.</li> <li>■ Use correct temperature range material for prevailing conditions.</li> <li>■ Use correct setting material (normal or slow) depending on method of erection.</li> <li>■ Not for use as an adhesive for fresh, plastic portland cement concrete or mortar.</li> <li>■ Lower temperatures will prolong cure time. Higher temperatures will rapidly accelerate cure time.</li> <li>■ Use of product outside of designated temperature range is not recommended.</li> <li>■ Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure.</li> </ul>

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

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

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <http://usa.sika.com/> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

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