

Product Data Sheet
Edition 9.23.2014
Sikadur® 31, SBA, Normal
Set (80°-115°F)

Sikadur® 31, SBA, Normal Set (80°-115°F)

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

Description	Sikadur® 31, SBA 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 VI requirements, and ASBI guidelines.
Where to Use	<ul style="list-style-type: none"> ■ Structural bonding of post-tensioned precast concrete bridge segments. ■ Sealing joints between concrete segments. ■ For use in segment-by-segment erection. ■ Supplied in three temperature grades to meet project requirements. (For cold weather conditions, refer to separate technical data sheet on Sikadur® 31, SBA [20°-45° F].).
Advantages	<ul style="list-style-type: none"> ■ 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. A:B=2:1 by volume. ■ Color-coded components to ensure proper mixing control.
Coverage	Approximately 12 ft ² /gal. or 36 ft ² ./3 gal. unit.
Packaging	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.

Shelf Life	2 years in original, unopened containers.	
Storage Conditions	Store dry at 40°-95°F (4°-35°C). Condition material to 70°-75°F (21°-24°C) before using.	
Color	Concrete gray	
Consistency	Non-sag paste	
Product name	Temp. Range	Mix Ratio, A:B by volume
Normal Set (40°-60°F)	40°-60°F (4°-15°C)	2:1
Normal Set (55°-95°F)	55°-95°F (13°-35°C)	2:1
Normal Set (80°-115°F)	80°-115°F (27°-46°C)	2:1
Pot Life (1 gallon volume)	Approximately 30 minutes at 73°F (23°C)	
Open Time (60°F, 95°F, 115°F)	60 minutes	
Compressive Strength (ASTM D-695)		
24 hours	2,000 psi, minimum (13.8 MPa)	
48 hours	6,000 psi, minimum (41.3 MPa)	
Contact Strength (ASTM C-882)		
48 hours	1,000 psi, minimum (6.9 MPa)	
Bond Strength (ASTM C-882): Hardened Concrete to Hardened Concrete		
2 day (moist cure)	1,000 psi, minimum (6.9 MPa)	
Heat Deflection Temperature (ASTM D-648)		
14 day	(fiber stress loading = 264 psi [1.8 MPa]) 120°F (49°C), minimum	

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

Surface 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	Apply the neat mixed Sikadur® 31, SBA 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	<ul style="list-style-type: none"> ■ Do not thin Sikadur® 31, SBA. 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.

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.

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.

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 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. 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 SIKA'S TERMS AND CONDITIONS OF SALE AVAILABLE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING 201-933-8800.

Visit our website at usa.sika.com

1-800-933-SIKA NATIONWIDE

Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 800-933-7452
Fax: 201-933-6225

Sika Canada Inc.
601 Delmar Avenue
Pointe Claire
Quebec H9R 4A9
Phone: 514-697-2610
Fax: 514-694-2792

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



Sika and Sikadur are registered trademarks. Printed in Canada.

