Sikadur® 33

High-modulus, high-strength, structural, very rapid-curing epoxy, smooth-paste adhesive

Description	ription Sikadur 33 is a 2-component, 100% solids, moisture-tolerant, high-modulus, high-strength structural, smooth-paste epoxy adhesive. It conforms to the current ASTM C-881, Types I a Grade-3, Class B/C* and AASHTO M-235 specifications. *except for gel time		
Where to Use	 Use to seal cracks and to secure injection ports in structural concrete and wood trusses prior pressure-injection grouting. 		
Advantages	 New smooth-paste consistency for vertical, horizontal and overhead crack sealing. Very rapid curing, even in thin film, for faster pressure-injection grouting. Injection may proceed as soon as 1 hour after application. 		

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

65°-75°F (18°-24°C) before using.

Color Concrete gray.

Mixing Ratio Component 'A': Component 'B' = 1:1 by volume.

Consistency Smooth-paste adhesive.

Pot Life Approximately 15 minutes. (60 gram mass)

Tack-Free Time 40°F (4°C)* 73°F (23°C)* 90°F (32°C)*

1.5-1.75 hr 25-30 min 20-25 min

Tensile Properties (ASTM D-638)

1 day Tensile Strength 3,300 psi (22.7 MPa)

Elongation at Break 0.2%

Modulus of Elasticity 8.3 X 10⁵ psi (5,700 MPa)

Flexural Properties (ASTM D-790)

1 day Flexural Strength (Modulus of Rupture) 4,800 psi (33.1 MPa)

Tangent Modulus of Elasticity in Bending 1.2 X 10⁶ psi (8,300 MPa)

Shear Properties (ASTM D-732) 1 day Shear Strength 2,200 psi (15.2 MPa)

Heat Deflection Temperature (ASTM D-648)

1 day 120°F (49°C)

[fiber stress loading = 264 psi (1.8 MPa)]

Bond Strength (ASTM C-882): Hardened Concrete to Hardened Concrete

2 day (dry cure) 3,000 psi (20.6 MPa)

Water Absorption (ASTM D-570) 7 day (24 hour immersion) 0.36 % Compressive Properties (ASTM D-695)

Compressive Strength, psi (MPa)

•	40°F (4°C)*	73°F (23°C)*	90°F (32°C)*
1 hour	30 (0.20)	5,600 (38.6)	4,600 (31.7)
2 hour	1,800 (12.4)	6,700 (46.2)	5,600 (38.6)
4 hour	3,500 (24.1)	7,800 (53.7)	5,700 (39.3)
8 hour	6,300 (43.4)	8,200 (56.5)	6,600 (45.5)
16 hour	6,900 (47.5)	8,500 (58.6)	7,100 (48.9)
1 day	7,400 (51)	8,600 (59.3)	7,300 (50.3)
3 day	7,900 (54.4)	9,000 (62)	7,600 (52.4)
7 day	8,300 (57.2)	9,200 (63.4)	7,800 (53.7)
14 day	8,500 (58.6)	9,200 (63.4)	8,100 (55.8)
28 day	8,600 (59.3)	9,400 (64.8)	8,300 (57.2)

Compressive Modulus 28 day 9.6 X 10⁵ psi (6,600 MPa)



^{*} Material cured and tested at the temperatures indicated

1 gal. yields 231 cu. in. of paste adhesive.		
2 gal. unit		
Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants. Preparation Work: Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means. Steel - Should be cleaned and prepared thoroughly by blast cleaning.		
Pre-mix each component. Proportion equal parts by volume of Component 'B' and Component 'A' into a clean pail. Mix thoroughly for 3 minutes with Sika paddle on low-speed (400-600 rpm) drill until uniform in color. Mix only that quantity that can used within its pot life.		
To seal injection ports and cracks for injection grouting - Place the neat mixed material over the cracks to be pressure-injected and around each injection port. Allow sufficient time to set before pressure-injecting. Use Sikadur 35, Hi-Mod LV, or Sikadur 52 for the low-viscosity injection adhesive. Consult technical data sheets on these products for more information. For additional information on pressure-injection grouting, contact Technical Services at 800-933-7452.		
 Minimum substrate and ambient temperature 40°F (4°C). Do not thin. Addition of solvents will prevent proper cure. Material is a vapor barrier after cure. Not for sealing cracks under hydrostatic pressure at the time of application. Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure. 		
Component 'A' - IRRITANT; SENSITIZER - Contains epoxy resin neopentyl glycol diglycidyl ether. May cause skin sensitization after prolonged or repeated contact. Eye irritant. May cause skin/respiratory irritation. Harmful if swallowed. Component 'B' - CORROSIVE; SENSITIZER - Contains amines. Contact with eyes or skin causes severe burns. May cause skin sensitization after prolonged or repeated contact. Skin/eye/respiratory irritant. Harmful if swallowed. Deliberate concentration of vapors of Component A or E for purposes of inhalation is harmful and can be fatal.		
Eyes: Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin: Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation: Remove person to fresh air. Ingestion: Do not induce vomiting. In all cases, contact a physician immediately if symptoms persist.		
Wear chemical resistant gloves/goggles/clothing. Ventilate area. In absence of adequate general and local exhaust ventilation, use a properly filled NIOSH respirator. Confine spill. Collect with absorbent material. Dispose of in accordance with current, applicable local, state, and federal regulations. Uncured material can be removed with approved solvent. Strictly follow manufacturer's warnings and instructions for use. Cured material can only be removed mechanically.		
Avoid direct contact with skin and eyes. Wear chemical resistant gloves/goggles/clothing. Use only with adequate ventilation. In absence of adequate general and local exhaust ventilation, use a properly filled NIOSH respirator. Wash thoroughly after handling product. Launder clothing before reuse. Store in a cool dry well ventilated area.		

■ Convenient easy mix ratio A:B = 1:1 by volume. Tolerant of moisture before, during and after cure.

■ High-modulus, high-strength, rapid curing smooth-paste adhesive.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at www.sikausa.com or by calling 800-933-7452.

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 Technical Data Sheet, product label and Material Safety Data Sheet which are available online at www.sikausa.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 Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

LIMITED WARRANTY: 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 Technical 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 APPLYINGLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKASHALL NOTBELIABLE UNDER ANY LEGRANTLEGAL THEORY FOR SPECIAL OF CONSEQUENTIAL DAMAGES. SIKASHALL NOTBELIABLE SHAPLAY LEGRANT HE OF THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Visit our website at www.sikausa.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 Phone: 52 442 2385800 Fax: 52 442 2250537







Sika and Sikadur are registered trademarks. Printed in Canada.