

Sikadur[®]-33

High Modulus, High-Strength, Structural, Rapid Curing Epoxy, Smooth-Paste Adhesive

Construction

Description	Sikadur-33 is a 2-component, 100% solids, moisture-tolerant, high-modulus, high-strength, structural, smooth-paste epoxy adhesive.
Uses	<ul style="list-style-type: none"> • Use to seal cracks and to secure injection ports in structural concrete and wood trusses prior to pressure-injection grouting • Anchor grouting e.g. bolts, dowels, pins and special fasteners • Bonding of precast concrete articles, metal to metal or concrete, bricks and ceramics, natural stones and compressed cement sheets • Filling and repairs of concrete pipes and tanks, fibreglass, concrete floors, stairs and columning
Advantages	<ul style="list-style-type: none"> • New smooth-paste consistency for vertical, horizontal and overhead applications • Very rapid curing, high-modulus, high-strength, rapid curing smooth-paste adhesive • Convenient easy mix ratio A:B = 1:1 by volume • Tolerant of moisture before, during and after cure • Excellent adhesion to masonry, concrete, wood, steel and most structural materials
Storage and Shelf Life	Minimum shelf life is approximately 2 years. Store under controlled conditions in original containers (minimum 4°C, maximum 35°C temperature range). Condition material to 18°C-24°C before using.
Instructions for Use	
Surface Preparation	<p>Surface must be clean and sound. It may be dry or damp, but free from standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants.</p> <p>Preparation Work</p> <p>Concrete: Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means.</p> <p>Steel: Should be cleaned and prepared thoroughly by blast cleaning.</p>
Mixing	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 colour. Mix only the quantity that can be used within its potlife.
Application	<p>Apply Sikadur-33 to the prepared substrate by trowel or gloved hand. Ensure the material is worked well (scrubbed) into the surface, this is particularly important on damp surfaces. There should be no standing water on concrete surfaces. If using Sikadur-33 as an adhesive, coat both adherents and press into place (on vertical and overhead surfaces temporary support must be provided). The adhesive layer should not be less than 2 mm.</p> <p>To seal injection ports and crack 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.</p> <p>Use Sikadur-52 for the low-viscosity injection adhesive. Consult the Technical Data Sheet on this product for more information. Also contact Technical Services for additional information on pressure-injection grouting.</p> <p>To anchor bolts, dowels, pins – Annular space around bolt should not exceed 3 mm, depth of embedment is typically 10-15 times the bolt diameter. Grout with neat Sikadur-33.</p>

Cleaning	Uncured material may be cleaned from application tools, etc. by using Sika Colma Cleaner (flammable solvent). Cured material can only be removed mechanically.
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Technical and Physical Data

Colour	Concrete grey
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Packaging	2 litre kit 20 litre kit
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Form	Smooth-paste adhesive
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Mix ratio	A : B = 1 : 1 by volume
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Curing Time	Temperature	Open Time	Curing Time
	+ 10° C	210 minutes	3 days *
	+20° C	90 minutes	2 days *
	+35° C	45 minutes	1 day *

* To achieve approx. 80% of the performance

Tensile Strength	10-15 MPa (14 days, +23°C)
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Flexural strength	20 MPa (14 days, +23°C)
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Layer Thickness	0.5mm min./10mm max
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Bond Strength	Time	Substrate	Bond Strength
	After 3 days	Dry Concrete	> 5 N/mm ² *
	After 3 days	Damp Concrete	> 5 N/mm ² *
	After 3 days	Steel Blast cleaned	> 10 N/mm ²
	After 3 days	Brick Dry	> 1.5 N/mm ² **

*100% concrete failure

** 100% brick failure

Compressive strength, (MPa)	24hrs	23MPa
	7 days	35MPa

Important Notes

- Minimum substrate and ambient temperature 4°C
- Do not thin. Addition of solvents will prevent proper cure.
- Material is a vapour barrier after cure
- Not for sealing and cracks under hydrostatic pressure at the time of application

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Handling Precautions

- Avoid contact with skin and eyes and breathing vapour
- Wear chemical resistant gloves and safety goggles when mixing and using
- If poisoning occurs contact a doctor or Poison Information Centre
- If swallowed do not induce vomiting
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly
- If in eyes, hold eyes open and flood with water for 15 minutes and consult a doctor
- In all cases contact a doctor if symptoms persist. See Material Safety Data Sheet for further information

Important Notification

The information, and, in particular, the recommendations relating to the application and end-use of Sika's products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Australian version of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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