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# PRODUCT DATA SHEET Sikadur®-32

Fluid structural adhesive, epoxy resine based

# DESCRIPTION

Sikadur<sup>®</sup>-32 is a multi-purpose structural epoxy adhesive, with medium viscosity (fluid), two component, for bonding new concrete on old concrete, metal sheets on concrete and use in general anchoring. Eventhough the product has a fluid consistency, it is not self-levelling.

# USES

Sikadur®-32 may only be used by experienced professionals.

- Bonding new concrete on old concrete structures
- Structural support fastening
- Bonding precast structural elements
- Construction joints (bonding)
- Fastening of elements, ex. roof drainage pipes and others, horizontally
- Edges repairs, cracks and superficial imperfections on architectural concrete structure.

# **CHARACTERISTICS / ADVANTAGES**

- Easy to apply, fluid, allows the application on horizontal and vertical surfaces (except under beams and slabs)
- Fast curing
- Excellent adherence on concrete, mortar, wood, stone, ceramic, metal and other construction substrates.
- Waterproof (after curing)
- High mechanical properties (tensile and compressive strengths)
- High chemichal resistance (oils, grease, etc)

# PRODUCT INFORMATION

Packaging	1kg (A+B) 5kg (A+B)
Colour	Light gray
Shelf life	12 months after production date if properly stored.
Storage conditions	Store in original and sealed packing, in temperatures between +5°C and +35°C. Protect from direct sun light and frost.
Density	~1,5 kg/l (A+B) (23°C)
TECHNICAL INFORMATION	N

Tensile strength in flexure	7 days: ~ 50 MPa	(ASTM C 580)

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Tensile adhesion strength	Concrete: Concrete:	<u>18,4 MPa (14 days)</u> 3,80 MPa (7 days) - con-	(ASTM C 882) Pull Off Test	
	crete failSteel:~ 12 MPa (3 days)Pull Off Test	Pull Off Test		
		Steel bar anchoring pull-of strenght in concrete class H25 (Fe A63 - 42H, diam. 12 mm, L=180 mm): >14.000 kgf.		
Service temperature	Min +10°C / Max	+40°C		

# **APPLICATION INFORMATION**

Mixing ratio	A : B = 2 : 1 (in weight)	
Consumption	Sikadur <sup>®</sup> -32 (A + B): 1,50 kg/m <sup>2</sup> per mm of thickness	
Ambient air temperature	Min. +10°C / Max. +40°C	
Pot Life	1 kg: 45 minutes (23°C)	
Curing time	Initial curing time: 24 hours Final curing time: 7 days	

# **BASIS OF PRODUCT DATA**

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

# ECOLOGY, HEALTH AND SAFETY

Ecology In liquid state components (A+B) contaminate water.

Do not dispose of into water or soil but according to local regulations.

• Transport Comp. A: Non-hazardous. Comp. B: All types: 8/65 c).

• Safety Precautions Product may cause skin irritations. Wear gloves and goggles.

If the material is accidentally splashed into the eyes, flush immediately with plenty of warm water and seek medical attention without delay.

• Toxicity Class 4, under the relevant Swiss health and safety codes.

Observe warnings on packing.

# **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY

Hardened mortar and concrete must be older than 28 days (depending on any minimal strength requirements). Verify the substrate strength by testing (concrete, masonry, natural stone). The substrate surface (all types) must be clean, dry or mat damp (no standing water) and free from contaminants such as dirt, oil, grease, existing surface treatments and coatings etc. Steel substrates must be de-rusted to a condition similar to Sa 2.5.The substrate must be sound and all loose or friable particles must be removed.

#### SUBSTRATE PREPARATION

#### Concrete, mortar, stone and brick

Concrete and other hardened mineral substrates

Product Data Sheet Sikadur®-32 June 2021, Version 01.02 020204030010000119 must be prepared by suitable means such as high pressure water jetting and / or blast cleaning, in order to obtain surfaces that are sound, clean, dry or mat damp (no standing water) and free from any cement laitance, ice, grease, oils, old coatings or other surface treatments. Any loose or friable particles must also be re-moved to achieve a contaminant free and open textured surface.

#### Steel

Steel surfaces must be cleaned and prepared thoroughly to the acceptable quality standard equivalent to Sa 2.5 i.e. normally by blast cleaning and then re-moving any dust by vacuum. Avoid dew point conditions

#### MIXING

Pre batched units (A & B Components): Mix components for at least 3 minutes with a suitable mixing spindle for the pack size. Spindle should be securely attached to a slow speed electric drill (max. 300rpm). Mix until the material becomes a smooth consistency and a uniform grey color. Avoid air entrapment at all times to a minimum while mixing. After 1st mix, pour this mix into a clean container and stir again for approximately 1 more minute. Do not part mix the pre batched units. When mixing large quantities of units, mix only the required quantity of units that can be used within their potlife.

### **APPLICATION METHOD / TOOLS**

Apply the mixed Sikadur<sup>®</sup>-32 Normal to the prepared surface by brush, roller, spray or with a trowel, and en-sure uniform and complete coverage. On hardened concrete substrates mechanically prepared to receive fresh concrete, always apply by brush and work the material well into the substrate. Place the fresh concrete whilst the Sikadur<sup>®</sup>-32 Normal layer is still 'tacky'. If the material becomes glossy and loses tackiness, apply a fresh coat with additional Sikadur<sup>®</sup>-32 Normal and proceed.



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#### **CLEANING OF EQUIPMENT**

The equipments and tools must be cleaned with solvent before the product hardening. After the hardening, the product can be removed only by mechanical means.

# LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

# **LEGAL NOTES**

The information, and, in particular, the recommendations relating to the application and end-use of Sika 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 accordance with Sika's recommendations. 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 user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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