

## PRODUCT DATA SHEET

# Sikadur®-51

## Epoxy flexible resin for sealing joints

## PRODUCT DESCRIPTION

Sikadur®-51 is a 2 component, 100% solid and self-leveling epoxy adhesive and sealant for joint sealing.

## **USES**

Sikadur®-51 may only be used by experienced professionals.

- Filling of horizontal control and construction joints and filling of cracks without movement.
- For use as a flexible adhesive on substrates such as concrete, wood, masonry and stone.

## **CHARACTERISTICS / ADVANTAGES**

- Permanent flexibility, does not harden over time.
- Prevents deterioration of joint edges.
- Excellent adhesive properties
- Complies with ACI-302.1R (4.10-Materials for sealing joints).
- It can be used on slopes of up to 15%.
- Absorbs shock, is durable and resists heavy traffic and forklift tires.
- It can be used as a safety sealant.

## PRODUCT INFORMATION

Packaging	Set of 10 kg (Parts A + B)	Set of 10 kg (Parts A + B)			
Color	Light gray	Light gray			
Shelf Life	2 years in the original un	2 years in the original unopened package.			
Storage Conditions		Between + 4 $^{\circ}$ C and + 35 $^{\circ}$ C. Condition the material at a temperature between 18 $^{\circ}$ C to 24 $^{\circ}$ C before use.			
Density	~ 1.22 kg/l at 23°C	~ 1.22 kg/l at 23°C			
Viscosity	Comp. A:	5.800 cps			
	Comp. B:	7.900 cps			
	Mix A + B :	7.000 cps			

## **TECHNICAL INFORMATION**

Shore D Hardness	> 50
Tensile Strength	3.9 MPa

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Tensile Modulus of Elasticity	19.3 MPa
Elongation at Break	90 %
Water Absorption	1.86 %

## APPLICATION INFORMATION

Mixing Ratio	Comp. A : Comp. B = 1 : 1 (by volume)				
Coverage	Approx. 0.3 kg / ml in joint 5 mm wide and 50 mm deep.  The following table indicates the approximate number of linear meters of board per kg of product (mixture A + B):				
	Joint width	Prof. 40 mm	Prof. 50 mm	Prof. 60 mm	
	3 mm	6.8 m	5.5 m	4.6 m	
	5 mm	4.1 m	3.3 m	2.7 m	
	10 mm	2.0 m	1.6 m	1.4 m	
	15 mm	1.4 m	1.1 m	0.9 m	
Pot Life	Volume	Volume		Time	
	3,8 l	3,8		20 - 25 min	
	250 ml		40 min		
Cure Time	7 to 8 hours				

#### APPLICATION INSTRUCTIONS

#### SUBSTRATE PREPARATION

The substrate must be clean and firm. It can be dry or humid but without puddles. All dust, cement slurry, grease, curing agents, impregnations, adhesion inhibitors, waxes and any other contaminants must be removed.

The concrete must be clean and prepared, removing the surface grout and giving it an open pore texture by abrasive treatment or equivalent mechanical means.

#### **MIXING**

Premix each component. Pour Component A and Component B into a clean container in equal parts by volume. Mix appropriately with a low speed drill (400 to 600 rpm) for at least 3 minutes until the consistency and color are uniform. Mix only the amount that will be applied within the product's lifetime.

## **APPLICATION METHOD / TOOLS**

Pour the Sikadur®-51 mixture into the prepared joints or use low pressure extrusion equipment. Allow the material to flow slowly, to settle and self-level until the board is completely filled. Scrape and remove excess material where required before it hardens.

#### **CLEANING OF TOOLS**

The uncured material can be removed with water and soap or solvent. Follow the instructions for use and warnings of the solvent manufacturer. The dry product

can only be removed mechanically.

## **LIMITATIONS**

- Do not dilute. The use of solvents can affect the product.
- The minimum temperature of the substrate at the time of placement must be + 4 ° C.
- For best results, the materials should be maintained at a temperature between + 18 ° C and + 24 ° C during application.
- Do not apply on standing water.
- This material should not be applied before the concrete is 28 days old. It is recommended to do it between 60 to 90 days, when the contraction by drying of the concrete has almost reached its totality.
- This material forms a vapor barrier after drying.
- The transmission of moisture or water vapor in concrete or masonry should be verified before application.
- Material not designed for use in constant immersion of water or any other liquid.
- For application only in joints without movement.
- The good performance of Sikadur®-51 depends on several factors: an adequate design of spacing, width and depth of the joints, thermally stable areas, stable humidity of the support base of the slabs, etc.
- To ensure a complete load transfer, when sealing control and / or construction joints, the depth of the same must be completely filled.
- Sikadur®-51 may change color over time, especially if exposed to ultraviolet radiation, artificial heaters or intense lighting.
- For applications other than sealing joints, consult the



Technical Department.

## **BASIS OF PRODUCT DATA**

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## OTHER RESTRICTIONS

See Legal Disclaimer.

## **ENVIRONMENTAL, HEALTH AND SAFETY**

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

## **LEGAL DISCLAIMER**

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

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#### Sika Corporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: +1-800-933-7452 Fax: +1-201-933-6225 usa.sika.com

#### Sika Mexicana S.A. de C.V.

Fax: 52 442 2250537

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920 Phone: 52 442 2385800



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