BUILDING TRUST

PRODUCT DATA SHEET

Sikadur®-51

Epoxy flexible resin for sealing joints

DESCRIPTION

Sikadur®-51 is a 2 component semi-self levelling epoxy sealant for joint sealing.

USES

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

- Filling of horizontal control and construction joints with little or no movement
- Filling of cracks with little or no movement

CHARACTERISTICS / ADVANTAGES

- 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 (non-pick)

APPROVALS / STANDARDS

Complies with ACI-302.1R (4.10-Materials for sealing joints)

PRODUCT INFORMATION

Packaging	3 kg kit (Parts A + B)	
Shelf Life	Twenty-four (24) months from date of manufacture when stored as stated in the original unopened package.	
Storage Conditions	Between + 4°C and + 35°C. Condition the material at a temperature between +8°C to +24°C before use.	
Colour	Light grey	
Density	~ 1.55 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 A Hardness	70 to 80
Shore D Hardness	> 50
Tensile Strength	3.9 MPa
Modulus of Elasticity in Tension	19.3 MPa

Elongation at Break	90 %
Water Absorption	1.86 %

APPLICATION INFORMATION

Mixing Ratio	Comp. A : Comp. B = 1 : 1 (by volume)	
Pot Life	10°C	~ 120 minutes
	20°C	~ 60 minutes
	30°C	~ 30 minutes
Curing Time	Pedestrian traffic	1 to 2 days (dependent on temperature)
	Heavy vehicle traffic	2 to 6 days (dependent on temperature)
Applied Product Ready for Use	Movement Capacity	± 2.5%, total movement = 5%
	Bond Strength: Sandblasted Steel	~ 2.5 MPa
	Bond Strength: Sandblasted Concrete	~ 2.0 MPa

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.

FURTHER DOCUMENTS

Sika Quantity Estimating Guide - Jointing Compounds

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 +8°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.
- The transmission of moisture or water vapor in concrete or masonry should be verified before application.
- Not designed for use in constant immersion of water or any other liquid.
- For application only in joints with little or no 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.
- Sikadur®-51 may change colour over time, especially if exposed to ultraviolet radiation, artificial heaters or intense lighting.
- For applications other than sealing joints, consult the Technical Department.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other

safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

All surfaces must be clean, dry and free from any loosely adhering particles or surface contaminants such as dirt, oil, dust, grease, etc.

SUBSTRATE PREPARATION

Joint Configuration: Width : Depth ratio should be 1 : 1 to 1 : 2. Minimum joint depth should be 12 mm.
In open joints the correct depth should be established by inserting Sika® PEF Backing Rod of a suitable dimension (refer Sika® PEF Rod data sheet). If the joint has a solid formed base it is essential to apply a bond breaker tape to this surface in order to prevent back adhesion. This will then allow the sealant unrestrained movement throughout the depth of the joint.
PRIMING:
Priming is not required, except for concrete surfaces that are slightly damp. Use Sikadur®-52 as a primer, brush it out to form an even and uniform film thickness. Allow primer to become tacky before applying Sikadur®-51.

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 colour are uniform. Mix only the amount that will be applied within the product's potlife.

APPLICATION METHOD / TOOLS

- Ensure correct joint configuration is used: width : depth ratio should be 1 : 1 to 1 : 2. Minimum joint depth should be 12 mm.
- After mixing is complete, load the Sikadur®-51 into cartridges, or apply directly from the container using a trowel or spatula.
- Protect each outside face of the joint with a layer of masking tape.
- Apply the Sikadur®-51 using a Sika hand or pneumatically operated caulking gun at an angle to eliminate the inclusion of air pockets. The sealant should be firmly extruded into the joint making sure that it is in full contact with the sides of the joint.
- Tool off the sealant to achieve a smooth finish. Tooling will also compress the sealant, promoting adhesion to the joint walls.
- Remove masking tape before sealant starts curing.

CLEANING OF TOOLS

The uncured material can be removed from tools with Sika® Thinner C (NZ). Cured product can only be removed mechanically.

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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