

PRODUCT DATA SHEET

Sikadur[®]-52

Low Viscosity Injection Resin

DESCRIPTION

Sikadur[®]-52 is two part, solvent-free, low viscosity injection-liquid, based on high strength epoxy resin. It is used for substrate temperatures between +5°C and +30°C.

USES

As an injection resin with good adhesion to concrete, mortar, stone, steel and wood. Sikadur[®]-52 is used to fill and seal voids and cracks in structures such as bridges and other civil engineering buildings, industrial and residential buildings, e.g. columns, beams, foundations, walls, floors and water retaining structures. It not only forms an effective barrier against water infiltration and corrosion promoting media, but it also structurally bonds the concrete sections together.

CHARACTERISTICS / ADVANTAGES

- Solvent-free
- Suitable for both, dry and damp conditions
- Usable at low temperatures
- Two grades for different climatic conditions (Normal and Long Potlife)
- Shrinkage free hardening
- High mechanical and adhesive strengths
- Hard but no brittle
- Low viscosity
- Injectable with single component pumps

PRODUCT INFORMATION

Composition	Modified solvent-free two-part epoxy resin.	
Packaging	Pre batched: Part A+B: 10 kg x 1 kg units	
Shelf life	24 months from date of production.	
Storage conditions	Stored properly in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.	
Colour	Part A:	Transparent
	Part B:	Brownish
	Part A+B mixed:	Yellowish-brownish
Density	Part A+B mixed (2 : 1): 1.1 kg/l (at 20°C)	

Viscosity	Temperature	Part A+B mixed (2 : 1)
	+10°C	~ 1200 mPa·s
	+20°C	~ 430 mPa·s
	+30°C	~ 220 mPa·s
	+40°C	-
Compressive strength	52 N/mm ² (after 7 days at 23°C) ≥ 50 MPa	(ASTM D695-96) (GB/T 2569)
Tensile strength in flexure	61 N/mm ² (after 7 days at +23°C) ≥ 30 MPa Not brittle destroy	(DIN 53452) (GB/T 2570)
Modulus of elasticity in flexure	Flexural Strength: 1800 N/mm ² (after 7 days at +23°C) ≥ 1500 MPa	(DIN 53 452) (GB/T 2568)
Tensile strength	37 N/mm ² (after 7 days at +23°C) ≥ 20 MPa	(ISO 527) (GB/T 2568)
Coefficient of thermal expansion	8.9 x 10 ⁻⁵ per °C (from -20°C to +40°C)	(EN ISO 1770)
Mixing ratio	Mixing ratio A : B = 2 : 1 parts by weight and by volume	
Substrate temperature	+5°C min. / +30°C max.	
Substrate moisture content	Dry or damp (SSD - Saturated Surface Dry: no standing water)	
Pot Life	Temperature	(1 kg mixture)
	+5°C	~ 120 minutes
	+10°C	~ 80 minutes
	+23°C	~ 25 minutes
	+30°C	~ 10 minutes
	+40°C	-

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

Maximum width of cracks to be injected: 5 mm. Sikadur®-52 is suitable for dry and damp, but not for wet injection conditions.

ECOLOGY, HEALTH AND SAFETY

MIXING

Prebatched packaging:
Add all of part B to part A. Mix with an electric mixer at slow speed (max. 250 rpm) for at least 3 minutes. Avoid entraining air.

APPLICATION METHOD / TOOLS

Cracks in horizontal slabs:

Saturate a few times using a brush or gravity fill them by pouring mixed Sikadur®-52 between two "dams" e.g. made from Sikaflex® sealant. Cracks penetrating slabs to their soffit should first be sealed on the underside, e.g. with Sikadur®-31 CFN epoxy mortar or a suit-

able cementitious Sika mortar.

Cracks in vertical structures:

Mixed Sikadur®-52 can be injected under pressure into the cracks using a single component injection pump, such as the Aliva.

AL-1200, AL-1250 or the Sika® Hand Pump. Injection ports (packers) are set at approx. 25 cm intervals beside the crack and the crack between the injection ports (packers) sealed e.g. with Sikadur®-31 CFN to prevent injection resin to escape during the injection process. Vertical cracks should always be injected from the bottom upwards. As soon as injection resin oozes out of the next packer / injection port, the first one is sealed and the injection process continued from the next one. After completion of the injection process, the injection port (packers) as well as the sealing material between the ports are removed.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Colma-Cleaner immediately after use. Hardened / cured material can only be mechanically removed.

PRODUCT DATA SHEET

Sikadur®-52

March 2022, Version 03.02

020707030010000005

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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.



PRODUCT DATA SHEET

Sikadur®-52

March 2022, Version 03.02

020707030010000005