

PRODUCT DATA SHEET

Sikadur[®]-52 LP (IN)

LOW VISCOSITY INJECTION RESIN

DESCRIPTION

Sikadur[®]-52 LP (IN) is two part, low viscosity, moisture insensitive injection-liquid, based on high strength epoxy resin.

USES

As an injection resin with good adhesion to dry concrete, mortar, stone, steel and wood. Sikadur[®]-52 LP(IN) 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. Sikadur[®]-52 LP(IN) is suitable for ASTM C 881, Type II and IV, Grade-1, Class E+F

CHARACTERISTICS / ADVANTAGES

- Solvent-free
- Suitable for both, dry and damp conditions
- Usable at low temperatures
- Shrinkage free hardening
- High mechanical and adhesive strengths
- Hard but not brittle
- Low viscosity
- Injectable with single component pumps

PRODUCT INFORMATION

Chemical Base	Epoxy Resin
Packaging	1 kg (A+B) Pre-batched unit. Part A: 0.80 kg metal container Part B: 0.2 kg metal container
Colour	Part A: Colourless Part B: Pale Yellow Part A+B mixed: Clear Pale yellow
Shelf Life	12 months from date of production
Storage Conditions	Stored properly in unopened, undamaged and sealed original packaging, in dry conditions at temperatures between +5°C and +40°C.
Density	Mixed Density : 1.1 kg/l (at +27°C)
Viscosity	~ 250 mPas at +30°C

Compressive Strength	Curing time	(According to ASTM D 695)
	7 days	Curing Temperature +30°C ~ 65 N/mm ²
	Curing Time	(According to ASTM C 579)
	7 days	Curing Temperature +30°C ~ 70 N/mm ²
Tensile Strength in Flexure	Curing Time	(According to ISO 178)
	7 days at +30 ⁰ C	+30⁰ C ~50 N/mm ²
Tensile Strength	~ 50 N/mm ² (after 7 days at +30°C cure)	(According to ASTM D 638)
Modulus of Elasticity in Tension	~ 2000 N/mm ² (after 7 days at +30°C cure)	(According to ASTM D 638)
Elongation at Break	Tensile Elongation (%) ~ 1.9%	(According to ASTM D 638)
Shrinkage	Passes	(According to ASTM C 883)
Consumption	Consumption/Yield : 1.11 kg of Sikadur®-52 LP (IN) is ~ equal to 1 l injection resin.	
Substrate Temperature	+10°C min. / +40°C max.	
Substrate Moisture Content	Dry condition	
Pot Life	1 kg mass	(According to ASTM C 881)
	Temperature +30 ⁰ C	Time ~ 50 min.

APPLICATION INSTRUCTIONS

Maximum width of cracks to be injected: 5 mm.
Sikadur®-52 LP (IN) is suitable for dry and moist condition.

SUBSTRATE PREPARATION

Requirements:
Sound, clean, free from oil and grease and surface treatments etc.
Pre-treatment for good bond:
Concrete, mortar, stone should be thoroughly prepared by high pressure water jetting or mechanical means such as grinding, chiselling etc. Cracks must be cleaned to remove dust with compressed air.

MIXING

Part A : Part B = 0.8 : 0.2 (by weight)
Mixing Time :
Pre-batched 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.
Bulk packaging:
Add both parts in the correct proportion into a suitable clean, dry container and mix in the same way as for the pre-batched units.

APPLICATION METHOD / TOOLS

Successful application depends on very careful preparation. The surface to be treated must be structurally sound, free from standing water, oil, grease, surface

contaminants. Dirt, dust and other foreign materials must be removed. Concrete which is fully contaminated with oil / grease, must be removed to the depth of sound & uncontaminated concrete.
Impregnation of cracks on horizontal slabs:
Impregnation is applied with a paint brush or roller until complete saturation of the substrate is achieved. Cracks are sealed by pouring mixed Sikadur® 52 LP(IN) directly from the mixing vessel between two “dams” made from Sikaflex® sealant. Crack penetrating slabs to their soffit should first be sealed on the underside with Sikadur®-31 epoxy mortar or a suitable cementitious Sika mortar.
Injection of cracks on horizontal / vertical slabs:
Injection flange / nipples are fixed along the crack line at an approximately 25 cm center-to-center distance with Sikadur®-31. Crack mouth should be opened and sealed with Sikadur®-31. Crack penetrating slabs to their soffit should also be sealed on the underside with Sikadur®-31 epoxy mortar or a suitable cementitious Sika mortar. Mixed Sikadur®-52 LP (IN) can be injected under pressure through injection ports using injection pump, such as Aliva AL-1200, AL-1250 or the Sika® Hand Pump. As soon as injection resin oozes out of the next injection port, the first one is sealed and injection process is continued from next port.
For horizontal crack, injection should start from any of the ends and to be continued and completed till the last port is used. For vertical crack, injection should start from the lowest port and continued upwards. After completion of the injection process, the injection ports as well as the sealing materials between the ports are removed.

CLEANING OF TOOLS

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

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.

LOCAL RESTRICTIONS

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

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 Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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.

Sika India Pvt. Ltd.

620, Diamond Harbour Road
Commercial Complex II
Kolkata - 700 034
Tel : +91 33 24472448
Fax : +91 33 23978688
Mail : info.india@in.sika.com



Product Data Sheet
Sikadur®-52 LP (IN)
August 2019, Version 01.01
020707030010000052

Sikadur-52LPIN-en-IN-(08-2019)-1-1.pdf