

PRODUCT DATA SHEET

Sikadur[®]-52 LVMY

VERY LOW VISCOSITY INJECTION RESINS

DESCRIPTION

Sikadur[®]-52 LVMY is a two part, solvent free, very low viscosity injection-liquids, based on high strength epoxy resins.

USES

As an injection resin with good adhesion to concrete, mortar, stone, steel and wood. Sikadur[®]-52 LVMY 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
- Shrinkage free hardening
- High mechanical and adhesive strengths
- Hard but not brittle
- Very low viscosity
- Injectable with single component pumps

PRODUCT INFORMATION

Composition	Modified solvent free, two part, epoxy resin	
Packaging	<ul style="list-style-type: none"> ▪ 2 kg sets ▪ 15 kg sets 	
Colour	Part A	Transparent
	Part B	Brownish
	Part A + B mixed	Light brown
Shelf Life	2 years from the date of production	
Storage Conditions	Store properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.	
Density	Part A	~1.065 kg/l
	Part B	~0.9 kg/l
	Part A + B mixed (2 : 1)	~1.06 kg/l

Viscosity	At 25 °C,	
	Part A	205 cps
	Part B	20 cps
	Part A + B	~90 cps

TECHNICAL INFORMATION

Compressive Strength	~60 N/mm ² at 7 days	(ASTM D 695 on prism sample)
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APPLICATION INFORMATION

Mixing Ratio	A : B = 2 : 1 parts by weight / volume	
Yield	1 kg of Sikadur®-52 LVMY is approximately equal to 0.9 L injection resin.	
Substrate Temperature	+20 °C min. / +40 °C max.	
Pot Life	~60 minutes (+30°C)	

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Sound, clean, free from oil and grease, old coatings and surface treatments, etc.

SUBSTRATE PREPARATION

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

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 LVMY between two "dams", e.g. made from Sikaflex® sealant. Cracks penetrating slabs to their soffit should first be sealed on the underside the previous day, with Sikadur®-31 CF epoxy mortar or a suitable cementitious Sika mortar.

Cracks in vertical structures

Mixed Sikadur®-52 LVMY can be injected under pressure into the cracks using a single component injection pump, such as the Aliva AL-1200 or AL-1250. Injection ports (packers) are set at approx. 25 cm intervals on the crack. The cracklines between the injection ports (packers) are sealed with Sikadur®-31 CF to prevent the injection resin from escaping 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 ports (packers) as well as the sealing material between the ports are removed after they have hardened.

CLEANING OF TOOLS

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

IMPORTANT CONSIDERATIONS

- Maximum width of cracks to be injected is 5 mm and minimum is approximately 0.1 mm
- Sikadur®-52 LVMY is suitable for dry and damp, but not for wet injection conditions
- Sikadur®-52 LVMY must be free of air bubbles to achieve maximum compressive strength
- Do not thin Sikadur®-52 LVMY. Solvents may prevent proper cure
- Sikadur®-52 LVMY is a highly reactive mixture with a relatively short pot-life. The reaction develops heat and if this heat is not allowed to escape, a considerable increase of the mixture temperature is created. This results in an additionally reduced pot-life for quantities of more than 1 kg. It is therefore important to make sure that the prepared Sikadur®-52 LVMY mixture can be rapidly injected into the crack and that it is never prepared in large quantities. The width of the crack should not exceed 5 mm.
- During hot weather applications, it may be necessary to pre-cool the components (for example in a cool box used for picnic storage - temperature 10 °C), but care must be taken to protect both part A and part B from becoming wet
- The consumption of material depends entirely on the prevailing conditions. It is recommended that careful estimation of consumption be made prior to the execution of the work and to also make certain that sufficient material is kept in reserve. When injecting load bearing cracks in reinforced concrete structures, care must be taken to eliminate the load causing the cracks otherwise another crack in a different area of the concrete may appear
- Injection with synthetic resin compounds requires experienced specialists and trained workers

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 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.

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.

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.

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Product Data Sheet
Sikadur®-52 LVMY
October 2018, Version 01.01
020707030010000015

Sikadur-52LVMY-en-MY-(10-2018)-1-1.pdf