

Product Data Sheet

Edition 1, 2020

Version no. 1

Sikadur® -52

Low Viscosity Injection Resin

Product Description	Sikadur® -52 is a two component, solvent-free, low viscosity injection-liquid, based on high strength epoxy resins. Complies with ASTM C881-78 Type I, Grade 1 Class B+C.		
Uses	Sikadur® -52 is used to fill and seal cavities and cracks in structural components such as bridges, industrial structures, columns, beams, foundations, walls, floors, slabs and water-retaining structures. It not only forms an effective barrier against water infiltration of corrosion promoting media, but also structurally bonds the concrete sections together.		
Advantages	<ul style="list-style-type: none"> ■ Solvent-free. ■ Suitable in both, dry and damp conditions. ■ Useable at low temperatures. ■ Two grades for different climatic conditions (normal and long pot life). ■ Shrinkage-free hardening. ■ High mechanical and adhesive strengths. ■ Hard but not brittle. ■ Very low viscosity. 		
Test Certificates	<ul style="list-style-type: none"> ■ Bautechnisches Versuchs - und Forschungsanstalt Salzburg, Austria. ■ Laboratoire de Ponts et Chaussée C.F.T.E., Aix-en-Provence, France. ■ Ministerio de Industrie e do Comercio, Instituto Nacional de Tecnologia, Rio de Janeiro. ■ Sikadur -52 has been tested as per SCAQMD Method 304-91. Result: VOC Content < 10 g/L 		
Product Data			
Colour	Yellowish (Comp. (A) : yellowish, Comp. (B): brownish).		
Packaging	3 kg units (A+B) pre measured.		
	Industrial packing: Comp. (A) = 20 kg pails and 180 kg drums. Comp. (B) = 10 kg pails, and 180 kg drums.		
Storage	Store in dry conditions at temperatures between + 5°C and 30°C.		
Shelf Life	12 months from date of production if stored properly in original unopened packing.		
Technical Data			
Density (20°C)	Comp. (A): 1.1 kg/l Comp. (B): 1.0 kg/l Comp. (A + B):1.1 kg/l (mixed)		
Viscosity (mpa.s)	C°	<u>Normal Type</u>	<u>L.P. Type</u>
	10	~ 1000	-
	20	~ 500	~ 290
	30	~ 250	~ 130
Coefficient of Thermal Expansion	89 x 10 ⁻⁶ per °C (from - 20°C to + 60°C).		
Mechanical Strengths (at 20°C and 65% r. h.)	<ul style="list-style-type: none"> ■ Compressive strength ■ Flexural strength ■ Tensile strength ■ Bond strength to concrete ■ Bond strength to steel 		<u>10 days</u> 53 N/mm ² 50 N/mm ² 25 N/mm ² 4 N/mm ² (concrete failure) 10 N/mm ²
Modulus of Elasticity (static)	1'060 N/mm ² .		



Application			
Mix Ratio	Normal Type / L. P. Type: Comp. (A) : (B) = 2 : 1 parts by volume and weight.		
Application	There are various application methods requiring different equipment, depending on the nature of the work to be carried out. It is therefore advisable to contact our Technical Department for assistance.		
Pot Life (2 kg)	°C	Normal Type	L.P. Type
	5	75 min.	-
	10	55 min.	-
	20	20 min.	60 min.
	30	10 min.	30 min.
	40	-	15 min.
Important	<ul style="list-style-type: none"> ■ Maximum width of cracks to be injected: 5 mm. ■ Minimum age of new concrete: 3- 6 weeks ■ Minimum temperature of concrete to be injected: +5°C - 10°C (depending on width and depth of crack) ■ Maximum permissible substrate temperature: +30°C. 		
Safety Instructions			
Ecology	In a liquid state Comp. (A + B) contaminate water. Do not dispose of into water or soil but according to local regulations.		
Transport	Comp. (A): Non-hazardous. Comp. (B): 8/66 c).		
Safety Precautions	Product may cause skin irritation. Wear gloves and goggles and apply barrier cream to hands. If the material is accidentally splashed into the eyes, flush immediately with plenty of warm water and seek medical attention without delay.		
Toxicity	Comp. (A): Class 4, under the relevant Swiss health and safety codes. Comp. (B): Class 4, under the relevant Swiss health and safety codes. Observe warning on packing.		
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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