



**PRODUCT DATA SHEET**

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EPOXY INJECTION GROUTING

# Sikadur®-55 SLV / SLV Slow-Cure

## SUPER LOW-VISCOSITY AND MOISTURE INSENSITIVE, EPOXY RESIN CRACK HEALERS / PENETRATING SEALERS

<b>Description</b>	Sikadur®-55 SLV and SLV Slow-Cure are two-component, 100 % solids, moisture-tolerant, epoxy crack healers/penetrating sealers. They are available as a fast tack-free grade or as a long pot-life version, to accommodate minimum decommission or extended working times. They are of super- low viscosity and high-adhesive strength formulated specifically for sealing both dry or damp cracks and concrete surfaces.
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>Structural repair of cracked concrete.</li> <li>Sealing surface of interior floor slabs and exterior, above-grade slabs from water, chloride and chemical attack.</li> <li>Sealing horizontal decks, patios, driveways, parking garages, and other structures exposed to pedestrian and pneumatic tire traffic.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>Penetrate cracks by gravity down to 2 mils (0.05 mm/0.002 in) in width.</li> <li>Structurally improve concrete surfaces.</li> <li>SLV open to traffic in 6 hours, SLV Slow-Cure in 24 hours, at 23 °C (73 °F).</li> <li>Super low viscosity, low surface tension for excellent crack penetration.</li> <li>High bond strengths, even in damp cracks.</li> <li>Prolong life of cracked concrete.</li> <li>As penetrating sealers, reduce water absorption and chloride ion intrusion.</li> <li>Meets ASTM C881 and AASHTO M-235 specifications.*</li> <li>Approved by the Ministère des Transports du Québec (MTQ).*</li> <li>Approved by the Alberta Transportation (AT).*</li> <li>US Patent No. (pending) for ultra-low viscosity healer/sealer to strengthen cracked concrete*.</li> <li>Product recognized by the British Columbia Ministry of Transportation(BC MoT).</li> </ul> <p>* SLV Slow-Cure conformance to specifications and approvals pending</p>

**Technical Data**

<b>Packaging</b>	Sikadur-55 SLV: 11.35 L (3 US gal.) unit [Component A: 7.57 L (2 US gal.) and Component B: 3.78 L (1 US gal.)] Sikadur-55 SLV Slow-Cure: 3.05 L (0.80 US gal.) unit [Component A: 2.1 L (0.55 US gal.) and Component B: 0.95 L (0.25 US gal.)]		
<b>Colour</b>	Clear, amber		
<b>Yield</b>	2.5 - 3.7 m <sup>2</sup> /L (100 - 150 ft <sup>2</sup> /US gal.) depending on application and substrate.		
<b>Shelf Life</b>	2 years in original, unopened packaging. Store dry at temperatures between 4 and 35 °C (40 and 95 °F). Condition product between 18 and 24 °C (65 and 75 °F) before using.		
<b>Mix Ratio (by volume)</b>	SLV A:B = 2:1 SLV Slow-Cure = 2.2:1		
<b>Properties at 23 °C (73 °F) and 50 % R.H.</b>			
<b>Viscosity (Mixed)</b>	SLV: 105 cps; SLV Slow-Cure: 125 cps		
<b>Pot Life (300 g)</b>	SLV: 20 min approx.; SLV Slow-Cure: 70 min approx.		
<b>Tack-Free Time</b>	4 °C (40 °F)/ > 11 h	15 °C (60 °F)/11 h	23 °C (73 °F)/6 h
<b>Tensile Properties ASTM D638</b>			
7 days [23 °C (73 °F)]	Tensile strength	48 MPa (7100 psi)	
	Elongation at break	10 %	
<b>Bond Strength ASTM C882</b>			
Hardened concrete to hardened concrete (moist cure)			
2 days	17 MPa (2500 psi)		
14 days	17 MPa (2500 psi)		
Hardened concrete to steel (moist cure)			
2 days	10 MPa (1500 psi)		
14 days	11 MPa (1600 psi)		
<b>Flexural Properties ASTM D790</b>			
7 days	Flexural strength	58 MPa (8500 psi)	
	Tangent modulus of elasticity	2.2 GPa (3.2 x 10 <sup>5</sup> psi)	
<b>Shear Strength ASTM D732</b>			
7 days	40 MPa (5800 psi)		
<b>Deflection Temperature ASTM D648</b>			
7 days	43 °C (110 °F)		
<b>Water Absorption ASTM D570</b>			
7 days (24 hr immersion)	0.60 %		

Compressive Strength ASTM D695, MPa (psi)				
	4 °C (40 °F)	15°C (60 °F)	23°C (73 °F)	32 °C (90 °F)
1 day	-	2.2 (320)	7.6 (1100)	33 (4800)
3 days	13 (2000)	45 (6500)	57 (8300)	55 (8000)
7 days	54 (7800)	71 (10 400)	75 (10 900)	57 (8300)
14 days	66 (9600)	75 (11 000)	81 (11 800)	68 (10 000)
28 days	80 (11 700)	82 (12 000)	82 (12 000)	68 (10 000)
Modulus of Elasticity ASTM D695				
7 days	2.0 GPa (3.0 x 10 <sup>5</sup> psi)			
VOC Content				
	0 g/L			

*Product properties above refer to Sikadur®-55 SLV only unless stated otherwise: results pending for Slow-Cure grade. Properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.*

## HOW TO USE

<b>Surface Preparation</b>	Substrate must be clean, sound, and free of surface moisture. Remove dust, laitance, grease, oils, curing compounds, waxes, impregnations, foreign particles, coatings and disintegrated materials by mechanical means, i.e. low-pressure water cleaning, shotblasting, sandblasting (CSP 1 - 3). For best results, substrate should be dry. However, a saturated surface dry (SSD) condition is acceptable.
<b>Mixing</b>	Pre-mix each component. Proportion 1 part component B to 2 parts component A by volume into a clean pail. Mix thoroughly for there (3) minutes with paddle on a low-speed drill (400 - 600 rpm) until uniformly blended. Mix only that quantity which can be used within its pot life.
<b>Application</b>	<p><b>To gravity feed cracks:</b> Sikadur®-55 SLV / SLV Slow-Cure are applied to horizontal surfaces by roller, squeegee or broom. Spread material over area and allow to pond over cracks. Let epoxy penetrate into cracks and substrate; remove excess leaving no visible surface film. For cracks greater than 3 mm (1/8 in) wide, fill crack with oven-dried sand before applying Sikadur®-55 SLV / Sikadur®-55 SLV Slow-Cure. Seal cracks from underside, when accessible, to prevent leakage.</p> <p>A second treatment may be required on very porous substrates. Apply second treatment before broadcasting. After treatment, wait at least 20 minutes at 23 °C (73 °F); cover with light broadcast of a dry #24 or similar sand. Distribute evenly over the surface at a rate of 0.7 - 1 kg/m<sup>2</sup> (15 - 20 lb/100 ft<sup>2</sup>). Allow Sikadur®-55 SLV to cure for 6 hours minimum and Sikadur-55 SLV Slow-Cure for 24 hours minimum, at 23 °C (73 °F). Remove any loose sand and open to traffic.</p> <p><b>To pressure inject cracks:</b> Use automated equipment. Set appropriate injection ports. Seal ports and crack with Sikadur®-31 Hi-Mod Gel<sup>CA</sup> or Sika AnchorFix®-3001. When the epoxy adhesive seal has cured, inject Sikadur®-55 SLV or SLV Slow-Cure with steady pressure.</p>
<b>Clean Up</b>	Uncured material can be removed with Sika® Epoxy Cleaner. Cured product can only be removed mechanically.
<b>Limitations</b>	<ul style="list-style-type: none"> <li>▪ Do not thin: solvents will prevent proper cure.</li> <li>▪ Minimum /maximum ambient and substrate temperature: 4 - 35 °C (40 -95 °F) .</li> <li>▪ Minimum age of concrete: 21 - 28 days, depending on curing and drying conditions.</li> <li>▪ Sealed concrete surface may appear “blotchy” due to differential absorption.</li> <li>▪ Not designed to seal cracks subject to hydrostatic pressure.</li> <li>▪ Not to be used as a film forming compound.</li> <li>▪ Material is a vapour barrier after cure.</li> <li>▪ Do not inject cracks &gt; 6 mm (1/4 in).</li> </ul>
<b>Health and Safety Information</b>	<p>For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.</p> <p>KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY</p>

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, within their shelflife. 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: [www.sika.ca](http://www.sika.ca)

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