

Product Data Sheet
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Identification no. 350-14L
Sikadur 35, Hi-Mod LV LPL

Sikadur® 35, Hi-Mod LV LPL

High-modulus, low-viscosity, high-strength,
extended pot life, epoxy adhesive

Description	Sikadur 35, Hi-Mod LV LPL is a 2-component, 100% solids, moisture-tolerant, low-viscosity, high-strength, multi-purpose epoxy resin adhesive. It conforms to the current ASTM C-881, Types I, II, and IV, Grade-1, Class-C** and AASHTO M-235 specifications. **except for bond strength
Where to use	<ul style="list-style-type: none"> ■ Low pressure and high pressure injection of cracks in structural concrete, masonry, wood, etc. ■ Gravity-feed of cracks in horizontal concrete and masonry. ■ Epoxy resin binder for epoxy mortar patching and grouting. ■ Seal interior slabs and exterior above-grade slabs from water, chlorides and mild chemical attack; also improves wearability. ■ Epoxy resin binder for epoxy mortar repair for structural pile members.
Advantages	<ul style="list-style-type: none"> ■ Extended pot life. ■ Low viscosity and excellent penetrating ability. ■ Slow reaction rate and low exotherm. ■ Convenient, easy mix ratio; A:B = 2:1 by volume. ■ Unique, high-strength, structural adhesive for "can't dry" surfaces. ■ Deep, penetrating and tenacious bonding of cracks in structural concrete. ■ Excellent chemical resistance.
Coverage	1 gal. yields 231 cu. in. of adhesive and grout. 1 gal. of adhesive, when mixed with 5 gal. by loose volume of oven-dried aggregate, yields approximately 808.5 cu. in. of epoxy mortar.
Packaging	3 gal. units. 165 gal. units.
How to Use	
Surface Preparation	Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants.

Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

Shelf Life	2 years in original, unopened container.		
Storage Conditions	Store dry at 40°-95°F (4°-35°C). Condition material to 65°-75°F (18°-24°C) before using.		
Color	Clear, amber.		
Mixing Ratio	Component 'A' : Component 'B' = 2:1 by volume.		
Viscosity (Mixed)	Approximately 250 cps.		
Pot Life	Approximately 90 minutes (250 grams). Approximately 40 minutes (250 grams) @ 100°F (38°C)		
Tensile Properties (ASTM D-638)	60°F (15°C)	73°F (23°C)	
7 day Tensile Strength	7,200 psi (49.6 MPa)	7,500 psi (51.8 MPa)	
Elongation at Break	4.0%	4.8%	
Heat Deflection Temperature (ASTM D-648)	7 day [fiber stress loading = 264 psi (1.8 MPa)] 120°F (49°C)		
Bond Strength (ASTM C-882): Hardened concrete to hardened concrete			
2 day (moist cure) Bond Strength	1,100 psi (7.6 MPa)		
14 day (moist cure) Bond Strength	1,300 psi (9.0 MPa)		
Water Absorption (ASTM D-570) 24 hrs.	(24 hr. immersion)	0.35%	
Compressive Properties (ASTM D-695):			
Compressive Strength @ 73°F (23°C)	90°F (32°C)		
1 day	1,450 psi (10.0 MPa)	7,100 psi (49.0 MPa)	
3 day	9,600 psi (66.2 MPa)	10,000 psi (69.0 MPa)	
7 day	11,800 psi (81.3 MPa)	11,100 psi (76.6 MPa)	
28 day	13,000 psi (89.6 MPa)	11,300 psi (78.0 MPa)	
Compressive Modulus 7 day	270 ksi (1,863 MPa)		



Preparation Work: Concrete - Should be cleaned and prepared thoroughly to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means. **Steel** - Should be cleaned and prepared thoroughly by blast cleaning.

Mixing	<p>Proportion 1 part Component 'B' to 2 parts Component 'A' by volume into a clean pail. Mix thoroughly for 3 minutes with a low-speed (400 - 600 rpm) drill using Sika Paddle until uniformly blended. <i>Mix only that quantity that can be used within its pot life.</i></p> <p>To prepare an epoxy mortar slowly add 4-5 parts by loose volume of an oven-dried aggregate to 1 part of the mixed Sikadur 35, Hi-Mod LV LPL and mix until uniform in consistency.</p>
Application	<p>To gravity feed cracks - Blow vee-notched crack clean with oil-free compressed air. Pour neat Sikadur 35, Hi-Mod LV LPL, into vee-notched crack. Continue placement until completely filled. Seal underside of slab prior to filling if cracks reflect through.</p> <p>To seal slabs - Spread neat Sikadur 35, Hi-Mod LV LPL over slab. Allow penetration. Remove excess to prevent surface film. Seal interior slabs and above-grade exterior slabs only.</p> <p>For an epoxy mortar - Prime prepared surface with neat Sikadur 35, Hi-Mod LV, LPL. Place prepared epoxy mortar before primer becomes tack-free. Place the epoxy mortar using trowels. Compact and level with vibrating screed or trowels. Finish with finishing trowel. Epoxy mortar is for interior use only.</p> <p>To pressure inject cracks - Suitable for low or high pressure injection. Use automated injection equipment or manual method. Set appropriate injection ports based on system used. Seal ports and crack with Sikadur 31, Hi-Mod Gel or Sikadur 33. When the epoxy adhesive seal has cured, inject Sikadur 35, Hi Mod LV LPL with steady pressure. Consult Technical Service for additional information.</p>
Limitations	<ul style="list-style-type: none"> ■ Minimum application temperature 40°F (4°C). ■ Do not thin with solvents. ■ Use oven-dried aggregate only. ■ Maximum epoxy mortar thickness is 1.5 in. (38 mm) per lift. ■ Epoxy mortar is for interior use only. ■ Do not seal exterior slabs on grade. ■ Minimum age of concrete must be 21-28 days, depending on curing and drying conditions, for mortar and to seal slabs. ■ Porous substrates must be tested for moisture-vapor transmission prior to mortar or sealing slabs. ■ Not for injection of cracks under hydrostatic pressure. ■ Do not inject cracks greater than 1/4 in. (6 mm) Consult Technical Service. ■ Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure.
Caution	<p>Component 'A' - Irritant; Sensitizer - Contains epoxy resin. Can cause sensitization after prolonged or repeated contact. Skin and eye irritant. Vapors may cause respiratory irritation. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. In case of high vapor concentrations, use an appropriate NIOSH approved respirator. Remove contaminated clothing.</p> <p>Component 'B' - Corrosive; Sensitizer Contains amines. Contact with eyes or skin may cause severe burns. Can cause sensitization after prolonged or repeated contact. Skin and eye irritant. Vapors may cause respiratory irritation. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. In case of high vapor concentrations, use an appropriate NIOSH approved respirator. Remove contaminated clothing.</p>
First Aid	<p>Eyes: Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin: Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation: Remove person to fresh air. Ingestion: Do not induce vomiting. In all cases, contact a physician immediately if symptoms persist.</p>
Clean Up	<p>Ventilate area. Confine spill. Collect with absorbent material. Dispose of in accordance with current, applicable local, state and federal regulations. Uncured material can be removed with approved solvent. Cured material can only be removed mechanically.</p>

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