



# 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 and AASHTO M-235 specifications.

**WHERE TO USE**

- ▲ 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, and to improve wearability.

**ADVANTAGES**

- ▲ 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.

**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.

TYPICAL DATA FOR SIKADUR 35, HI-MOD LV LPL (Material and curing conditions @ 73F and 50% R.H.)		
<b>SHELF LIFE</b>	2 years in original, unopened container.	
<b>STORAGE CONDITIONS</b>	Store dry at 40-95F (4-35C). <b>Condition material to 65-75 F before using.</b>	
<b>COLOR</b>	Clear, amber.	
<b>MIXING RATIO</b>	Component 'A' : Component 'B' = 2:1 by volume.	
<b>VISCOSITY</b>	Approximately 325 cps.	
<b>POT LIFE</b>	Approximately 65 minutes (250 grams). Approximately 60 minutes (800 grams), 1 qt.	
<b>TENSILE PROPERTIES (ASTM D-638)</b>	<b>60F</b>	<b>73F</b>
<b>7 day Tensile Strength</b>	7,200 psi (79.6 MPa)	8,000 psi (55.1 MPa)
<b>Elongation at Break</b>	3.2%	3.7%
<b>DEFLECTION TEMPERATURE (ASTM D-648)</b>		
<b>7 day Deflection Temperature</b>	120F (fiber stress loading = 264 psi)	
<b>BOND STRENGTH (ASTM C-882): Hardened concrete to hardened concrete @ 60F</b>		
<b>2 day (moist cure) Bond Strength</b>	1,350 psi (9.3 MPa)	
<b>14 day (moist cure) Bond Strength</b>	2,000 psi (13.7 MPa)	
<b>WATER ABSORPTION (ASTM D-570)</b>		
<b>24 hrs Total Water Absorption</b>	0.35%	
<b>COMPRESSIVE PROPERTIES (ASTM D-695): COMPRESSIVE STRENGTH, PSI</b>		
<b>1 day</b>	2,800 psi (19.3 MPa)	
<b>3 day</b>	9,800 psi (67.5 MPa)	
<b>7 day</b>	11,800 psi (81.3 MPa)	
<b>28 day</b>	13,000 psi (89.6 MPa)	
<b>MODULUS OF ELASTICITY, PSI</b>		
<b>7 day</b>	3.8 x 10 <sup>5</sup> psi	

**MIXING**

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.

Mix only that quantity that can be used within its pot life.

**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.

**APPLICATION**

**To gravity feed cracks** - 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.

**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.

**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.

**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.

#### LIMITATIONS

- ▲ Minimum application temperature 40F.
- ▲ Do not thin with solvents.
- ▲ Use oven-dried aggregate only.
- ▲ Maximum epoxy mortar thickness is 1 ½ in. 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 ¼ in. Consult Technical Service.

## CAUTION

**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/MSHA approved respirator. Remove contaminated clothing.

**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/MSHA approved respirator. Remove contaminated clothing.

#### FIRST AID

In case of skin contact, wash immediately and thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician immediately. For respiratory problems, remove person to fresh air. Wash clothing before re-use.

#### CLEAN UP

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.

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**KEEP CONTAINER TIGHTLY CLOSED  
NOT FOR INTERNAL CONSUMPTION**

**KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY**

**CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION**

Sika warrants its products to be free from manufacturing defects and to meet Sika's current published properties when applied in accordance with Sika directions and tested in accordance with ASTM and Sika Standards. User determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product and excludes labor or the cost of labor. Any claim for breach of this warranty must be brought within one year of the date of purchase.

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