

HIGH-MODULUS EPOXY INJECTION RESIN BINDER

DESCRIPTION

EP-SLV is a 100% solids, high-modulus, moisture-insensitive, very low-viscosity epoxy adhesive for gravity feed or pressure injection of cracks in concrete.

APPLICATIONS

EP-SLV primary use is for pressure injection and gravity feed crack repair in concrete and masonry. EP-SLV can also be used to heal and seal concrete slabs.

ADVANTAGES

- High modulus, high strength adhesive
- Super low viscosity for deep penetration
- Moisture insensitive
- High chemical resistance

COMPLIANCES

- ASTM C881 (Type I, II, IV, V. Grade 1. Class C.)
- AASHTO M235
- VOC compliant, 0 g/L

PACKAGING

16 oz. cartridge

- side by side cartridge (2:1 mix ratio)
- 12 cartridges per case

1-gallon unit

- Component A: (1) 1-gallon can (partial fill)
- Component B: (1) 1-gallon can (partial fill)

3-gallon unit

- Component A: (2) 1-gallon can
- Component B: (1) 1-gallon can

15-gallon unit

- Component A: (2) 5-gallon pail
- Component B: (1) 5-gallon pail

Appearance of Components: A - Clear, B - Amber

Shelf Life: 2 years in original unopened container

Storage: 40°F to 95°F in dry and dark conditions

Temperature Considerations: IMPORTANT! Epoxy resins are temperature sensitive and care should be taken to condition all components to between 65°F to 85°F for a minimum of 24 hrs. prior to mixing and placement. Temperatures colder than stated range increase viscosity of resins and inhibit mixing and flow of materials. Temperatures warmer than stated range decrease viscosity of resins, hasten the cure and reduce the working time. Mixing and curing at less than ideal temperatures, <60°F or >95°F, will require special considerations.

CURE TIME

Use the table below to determine minimum cure times based on the temperature of the materials and the substrate.

	Average Temperature of Materials & Substrate (°F)					
Cure Temp	60-64	65-69	70-74	75-79	80-84	85+
Cure Time	10 hrs	9 hrs	7 hrs	6 hrs	5.5 hrs	4.5 hrs

*Set times are merely averages, site conditions will dictate actual cure response.

1/21/2021

INSTALLATION

Surface Preparation: Cracks to be bonded must be clean and sound. Remove all dirt, grease, oil, and other foreign material that may prevent a good bond. The crack may be damp or dry, but free of standing water. Use clean, oil free, compressed air to blow out any remaining dust or debris prior to installation.

Mixing: CARTRIDGE: Remove the protective cap from the adhesive cartridge and insert the cartridge into the recommended dispensing tool. Before attaching the mixing nozzle, balance the cartridge by dispensing a small amount of material until both components are flowing evenly. Attach the provided flow restrictor, screw the provided mixing nozzle on to the cartridge (do not modify mixing nozzle). Confirm that internal mixing element is in place prior to dispensing adhesive. Begin squeezing a small amount of material from the mixing nozzle onto a disposable surface until the material extruded is a smooth uniform color with no streaks. Material with an off color or streaking is not properly mixed and will not set properly or perform as expected. Do not use this part for installation. Once the proper mixture is achieved, discard the material that was initially extruded from the nozzle per federal, state, and local regulations, then begin installation. **BULK:** Mix equal volumes of Component A and Component B for 3 minutes with a low speed drill (300 rpm), jiffy mixer, or paddle. Mix only what can be used during the pot life.

Placement: For Pressure Injection: first prepare the surfaces adjacent to the cracks to expose clean, sound concrete. The injection ports should be spaced from 8" to 36" apart, depending on the crack width and the thickness of the member to be injected. Next, the crack should be sealed at the surface with EP-GEL FAST or AWA-GEL at a paste width of 1.5" on each side of the crack. After the EP-GEL FAST or AWA-GEL has cured, inject EP-SLV epoxy with pressurized dispensing equipment or use the EP-SLV cartridges. EP-SLV cartridges are only designed for small repair projects with cracks at least 1/16" in width or larger. For large projects and/or crack widths less than 1/16", use EP-SLV bulk units with automated dispensing equipment. Please contact E-Chem for additional guidance and procedures.

To Bind Mortar and Grout for Patching: Premix entire unit of A and B or exact portions, 2 parts A to 1 part B by volume, with low speed (300 rpm) Jiffy mixer for 3 minutes. Hold back some neat resin for priming patch. Paint concrete to be patched with just enough neat resin to wet out the surface. Slowly add oven-dried aggregate (typically 4-5 parts of aggregate to 1 part epoxy) to the mixed epoxy while mixing with a slow speed Jiffy mixer, being careful not to mix in air. Prepared mortar must be placed before primer becomes tack free. Epoxy mortar may be placed and leveled with trowels. Do not disturb patch until it is fully cured.

Gravity-Feed Cracks: Inspect and Seal underside of slab prior to filling reflective cracks. Pour neat EP-SLV into crack, continuing placement until crack is full. It may be necessary to "V"-notch cracks to aid in placement.

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LIMITATIONS

- For professional use only
- Do not thin with solvents
- Compressed air equipment must have an oil/air separator.
- Minimum age of concrete must be 28 days before applying.
- Always test a small amount to ensure that the product is mixed properly and that the material will harden properly before proceeding with the installation.
- Do not inject cracks wider than ¼" without contacting E-Chem.
- Surface temperatures must be 40°F or above.
- Do not expose stored or uncured product to cold or freezing temperatures below 35°F for any length of time.
- Consult E-Chem representative when mixing or placing outside of the temperature recommendations listed.

CLEAN UP

EQUIPMENT: Uncured material can be removed with C-CLEAN100 or approved solvent. Cured material can only be removed mechanically.

MATERIAL: Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state and federal disposal regulations.

CAUTIONS

READ SDS PRIOR TO USING PRODUCT!

- Component A: Irritant
- Component B: Corrosive
- Product is a strong sensitizer. Use of safety goggles and chemical resistant gloves are recommended.
- Use in a well-ventilated area and avoid breathing vapors
- Use of a NIOSH/MSHA organic vapor respirator is recommended if ventilation is inadequate.
- Avoid skin contact
- Do not take internally
- Keep out of reach of children

FIRST AID

EYE CONTACT: Flush immediately with water for at least 15 minutes. Contact physician immediately.

RESPIRATORY CONTACT: Remove person to fresh air.

SKIN CONTACT: Remove any contaminated clothing. Remove epoxy immediately with a dry cloth or paper towel. Solvents should not be used as they carry the irritant into the skin. Wash skin thoroughly with soap and water.

IF INGESTED: Do not induce vomiting. If swallowed give water to drink. Seek medical treatment immediately.

GENERAL: Remove contaminated soaked clothing immediately. In the event of persistent symptoms receive medical treatment.

CURED EPOXY RESINS ARE INNOCUOUS.

WARRANTY

This product is warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. This warranty and guarantee are expressly in lieu of all others, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and may not be extended by representatives or any persons, written sales information, or drawing in any manner whatsoever. While the manufacturer recommends uses for the product based on tests believed reliable, no warranties, express or implied, or guarantees can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salespersons or company representatives are not authorized to extend or vary any warranties or guarantees beyond those outlined herein, nor may the manufacturer's or seller's limitation of liability be waived or altered in any manner whatsoever.