

REZI-WELD™ LV

Low Viscosity Injection Epoxy

DESCRIPTION

REZI-WELD LV low viscosity injection epoxy is a moisture insensitive, very low viscosity, high modulus, high strength structural injection resin. REZI-WELD LV resists most chemicals and features a unique, innovative unitized packaging concept. It combines two pre-measured components into an easy-to-handle single unit along with a handy wood-mixing paddle. The unitized packaging eliminates mishandling and mismatching of the components on the jobsite.

USES

REZI-WELD LV is designed for gravity feeding or pressure injecting using two-component metering systems, hand-held bulk guns, or pressure pots. It is suitable for injecting fine, non-moving structural cracks for long-term repairs.

When mixed with sand or aggregates, REZI-WELD LV makes an economical, easy-to-use epoxy mortar for patching or repairing defects in concrete substrates, securing machinery base plates to concrete floors, interior non-skid toppings, and structural bonding applications.

SPECIFICATIONS

- ASTM C 881 Type I, II, IV and V, Grade 1, Class B & C
- AASHTO M 235 Type I, II, IV and V, Grade 1, Class B & C
- USDA accepted
- Approved by the Ministry of Transportation, Quebec
- Various department of transportation approvals

PACKAGING

1 Quart (.95 Liter) Units
1 Gallon (3.79 Liter) Units
15 Gallon (56.85 Liter) Units

SHELF LIFE (TYPICAL)

One year in unopened, sealed containers stored in a dry environment between 60° F and 95° F (16° C and 35° C).

FEATURES/BENEFITS

- Ideal for pressure injection and gravity feeding.
- Advantageous as a low viscosity, epoxy adhesive binder.
- Bonds cured concrete to fresh or hardened concrete.
- Combines with aggregate to form an interior non-skid topping.
- Resists many industrial chemicals.
- Features low viscosity, high modulus, high strength, self-leveling characteristics.
- Furnished in unitized packaging.
- Can be extended with sand to make an epoxy mortar.

LEED INFORMATION

May help contribute to LEED credits:

- EQ Credit 4.1: Low Emitting Materials: Adhesives and Sealants
- MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally
- MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally

APPLICATION

Surface Preparation ... All surfaces to be bonded must be free of standing water and completely clean of dirt, rust, curing compounds, grease, oil, paint, waxes, and other materials that would prevent an optimal bond. Concrete should be prepared by mechanical abrading or grit blasting to a sound and profiled surface. Vacuum or blow dust away with oil-free compressed air. Mechanically abrade metal base plates to a bright metal finish. Exposed steel surfaces should be sandblasted and vacuumed clean; if not possible, degrease the surface and use sandpaper or a wire brush to reveal continuous, bright metal.

Mixing ... Condition all components to 60° F to 85 °F (16° C to 29° C) for 24 hours prior to use. Use the double-boiler method or store material in a warm room prior to application. Premix each component. Mechanically mix at slow speed (600-900 rpm) using a drill and Jiffy® Blade or drum mixer for three minutes or until completely mixed while scraping the sides to ensure complete blending of components. Avoid air entrapment. Scrape the sides of the container to ensure complete blending of components. Mix only the amount of epoxy that can be applied within the product's pot life. Pot life will decrease as the ambient temperature and/or mass size increases.

CONTINUED ON REVERSE SIDE...

TECHNICAL DATA*

Property	Typical Data	Test Method
7 Day Cure @ 77°F (25°C)		
Tensile Strength, psi	7000 (48.3 MPa)	ASTM D 638
Elongation, %	1.6	ASTM D 638
Hardness, Shore D	85	ASTM D 2240
Flexural Strength, psi	8000 (55.2 MPa)	ASTM D 790
Flexural Modulus, psi	520,000 (3585 MPa)	ASTM D 790
Compressive Yield Strength, psi	12,000 (82.7 MPa)	ASTM D 695
Compressive Modulus, psi	260,000 (1800 MPa)	ASTM D 695
Bond Strength, psi (2 days)	2500 (17.25 MPa)	ASTM C 882
Bond Strength, psi (14 days)	3200 (22.08 MPa)	ASTM C 882
Absorption, % (24 hours)	0.13%	ASTM D 570
Linear Coefficient of Shrinkage	0.004	ASTM D 2566

Component Properties	Resin	Hardener
Mix Ratio (PBV=Part by Vol.)	2 PBV	1 PBV
Appearance	Clear	Amber
Wt./gal, lb./gal. (Kg/L)	9.6 (1.15 Kg/L)	8.2 (.98 Kg/L)

Pot Life [1 Qt. Unit (0.95 L @ 77° F (25° C)]: 30 min.

Mixed Color: Medium Amber

Mixed Viscosity: 2000 Cps

* All technical data is typical information, but may vary due to test methods, conditions and operators.

For most recent data sheet, further LEED information, and MSDS, visit www.wrmeadows.com.

**LIMITED WARRANTY**

“W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order.” Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.

Crack Injecting ... Epoxy can be gravity fed into horizontal cracks that are small (1/4" [6.35 mm] maximum width) and have limited depth. For large injection projects, self-proportioning, mixing, and pressure injection equipment is recommended. For small injection projects, REZI-WELD (IP) or REZI-WELD LV STATE may be suitable.

Interior, Non-Skid Topping ... Apply at a rate of 100 ft.²/gal. (2.66 m²/L). Then apply layer of sand or grit over epoxy and allow to set. Blow excess sand away. NOTE: REZI-WELD LV IS NOT TO BE USED AS A FINISHED FLOOR COVERING OR PROTECTIVE TREATMENT. Follow standard epoxy flooring system requirements, including water vapor transmission rates.

Aggregates for Epoxy-Resin Mortars ... Combine clean, dry aggregates with freshly mixed epoxy in a ratio of 1 part epoxy to 1 to 4 parts, by volume, of graded aggregates (not to exceed six parts sand). Patch thickness should not exceed 4" (101.6 mm) per lift.

Cleanup ... Clean tools and equipment immediately with toluene or xylene. Clean equipment away from all ignition sources and avoid breathing vapors or allowing epoxy-containing solvent to contact skin. Should this material come in contact with the skin, wash thoroughly with soap and water, not solvent.

COVERAGE

One gallon (3.8 L) neat covers approximately 85-100 ft.² (2.09-2.66 m²/L) depending on the surface porosity and end use application. One gallon (3.8 L) mixed 1:1 with dry aggregate yields approximately 350 in.³ (5735 cm³) of grout.

PRECAUTIONS

DO NOT DILUTE. Mix complete units only. Not recommended for use when the concrete and air temperature is below 40° F (4° C) or will drop below 40° F (4° C) within 24 hours. Do not use to seal cracks under hydrostatic pressure. Do not warm epoxy over direct heat. REZI-WELD LV should not be used as an exterior coating, as it is not color stable to ultraviolet light (sun).

HEALTH HAZARDS

This epoxy is corrosive. Personal protective equipment is necessary. Unused epoxy will generate excessive heat, especially in large quantities. Unused epoxy should be mixed with dry sand in the container to help lower heat. Refer to Material Safety Data Sheet for complete health and safety information.