

CSI Code: 03 64 23



NO. 392-S

AUGUST 2009 (Supersedes November 2004)

REZI-WELD_{TM} LV STATE

Ultra-Low Viscosity Injection Epoxy

DESCRIPTION

REZI-WELD LV STATE is an ultra-low viscosity, rapid setting, epoxy-based, structural injection resin. This anchoring adhesive and injection resin is moisture insensitive and provides high mechanical properties and bond strength to concrete and various other substrates. REZI-WELD LV STATE resists most chemicals and forms a structural monolithic bond.

USES

REZI-WELD LV STATE is designed for gravity feeding or pressure injecting using two-component metering pumps, hand-held bulk guns, or pressure pots. It is suitable for injecting fine, non-moving structural cracks for long-term repairs. REZI-WELD LV STATE makes an economical, easy-to-use epoxy mortar for patching or repairing defects in concrete substrates.

SPECIFICATIONS

- ASTM C 881 Type I, II, IV and V, Grade 1, Classes B & C
- AASHTO M 235 Type I, II, IV and V, Grade 1, Classes B & C
- Various departments of transportation approvals

FEATURES/BENEFITS

- Ultra-low viscosity is ideal for pressure injection and gravity feeding.
- Advantageous as a low viscosity, epoxy adhesive
- Bonds cured concrete or metal to concrete.
- Combines with aggregate to form an interior nonskid topping.
- Resists industrial chemicals, as well as impact and attack from moisture.
- Features low-viscosity, high-modulus, highstrength, self-leveling characteristics.
- Furnished in two convenient cartridge sizes.

COVERAGE

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

SHELF LIFE (TYPICAL)

One year in unopened cartridge, stored between 40° F and 95° F (4° and 35° C).

PACKAGING

15 Oz. (450 mL) Cartridge 6.3 Oz. (190 mL) Cartridge 3 Gallon (11.4 L) Unit 15 Gallon (57 L) Unit

CARTRIDGE 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 which would prevent an optimal bond. Concrete should be prepared by mechanical abrading or high pressure water jetting to a sound 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 ... The resin and hardener (contained in the cartridge) must be conditioned between 65°F and 85° F (18° C - 29° C) at the time of application. Use the double-boiler method, or store material in a warm room, prior to application. Hand shake cartridge before use.

APPLICATION METHOD

- Substrate temperature must be 40° F (4° C) and rising at the time of application.
- Ensure static mixer nozzle is free of obstructions.
- Remove nose cap.
- Remove nose plug.
- Insert static mixer onto cartridge nose. Slide retaining nut (located in sealed bag) down static mixer shaft.
- Tighten retaining nut onto cartridge nose.
- Load into standard dual cartridge dispenser tool.
- Dispense and discard approximately a 3" bead of material until a uniform amber color is achieved.
- Re-insert nose plug and seal with nose cap to seal a partially used cartridge.
- 10. Follow all instructions prior to application of partially used cartridge.

CONTINUED ON REVERSE SIDE...

TECHNICAL DATA*

PROPERTY 7 Day Cure @ 77° F (25° C)	Typical Data	Test Method
Viscosity, cps	500	ASTM C 881
Tensile Strength, psi	7000 (48.3 MPa)	ASTM D 638
Elongation, %	2.0	ASTM D 638
Hardness, Shore D	85	ASTM D 2240
Flexural Strength, psi	8500 (55.2 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)	2350 (17.25 MPa)	ASTM C 882
Bond Strength, psi (14 days)	3000 (22.08 MPa)	ASTM C 882
Heat Deflection Temperature	120° F (50° C)	ASTM D 648
Absorption, % (24 hours)	0.85%	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
Pot Life (100 gms) @ 75° F (23.9° C)	30 min.	

^{*}All technical data is typical information, but may vary due to testing methods, conditions, and operators.

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

Gravity Feed ... Seal underside of elevated slab prior to filling if cracks reflect full depth. Pour neat, properly mixed and conditioned REZI-WELD LV STATE into v-notched crack. Continue placement until completely filled.

Interior, Non-Skid Topping ... Apply at a rate not to exceed 100 ft. 2 /gal. (2.66 m 2 /L). Then apply layer of sand or grit over epoxy and allow epoxy to cure. Blow or vacuum excess sand away. NOTE: REZI-WELD LV STATE IS NOT TO BE USED AS A FINISHED FLOOR COVERING OR PROTECTIVE TREATMENT.

Aggregates for Epoxy-Resin Mortars ... Combine clean, dry aggregates with freshly mixed epoxy in a ratio of one part epoxy to 4 - 5 parts, by volume, of graded aggregates (not to exceed six parts sand). Patch thickness should not exceed 1.5" (50.5 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 skin, wash thoroughly with soap and water, <u>not</u> solvent.

PRECAUTIONS

DO NOT DILUTE. Mix complete units only. Not recommended for use when the concrete temperature has been below 40° F (4° C) for the past 24 hours. Do not use to seal cracks under hydrostatic pressure. Do not warm epoxy over direct heat. REZI-WELD LV STATE is not to be used as an exterior coating, as it is not resistant to ultraviolet rays.

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.

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

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

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