



## **DATA SHEET NO. 3700-622**

# REZI-WELD™ LV Low Viscosity Injection Epoxy

#### **DESCRIPTION**

REZI-WELD LV low viscosity injection epoxy is 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 1, 11, 1V and V, Grade 1, Class B & C
- AASHTO M 235 Type 1, 11, 1V and V, Grade 1, Class B & C
- USDA Accepted
- Approved by the Ministry of Transportation, Quebec
- Various Department of Transportation Approvals
- Agriculture and Agri-Food Canada accepted.

#### **PACKAGING**

0.95 L (1 U.S. qt.) unit 3.79 L (1 U.S. gal.) unit 56.85 L (15 U.S. gal.) unit

## **SHELF LIFE (TYPICAL)**

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

#### **FEATURES AND 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-levelling 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 which would prevent an optimal bond. Concrete should be cleaned 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 16 - 29°C (60 - 85°F) for 24 hours prior to use. Use the double-boiler method, or store material in a warm room, prior to application. Pre-mix each component. Mechanically mix at slow speed (600 - 900 rpm) using a drill and Jiffy® Blade or drum mixer for 3 minutes or until completely mixed, while scraping the sides to ensure complete blending of components. Avoid air entrapment. Mix only very small quantities by hand for a minimum of 3 minutes or until completely mixed while scraping the sides to ensure complete blending of components. Avoid air entrapment. 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.

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#### **TECHNICAL DATA\***

At 7 days cure at 25°C (77°F).

Property	Typical Data	Test Method
7 day cure at 25°C (77°F)		
Tensile Strength	48.3 MPa	ASTM D 638
	(7,000 psi)	
Elongation, %	1.6	ASTM D 638
Hardness, Shore D	85	ASTM D 2240
Flexural Strength	55.2 MPa	ASTM D 790
	(8,000 psi)	
Flexural Modulus	3,585 MPa	ASTM D 790
	(520,000 psi)	
Compressive Yield	82.7 MPa	ASTM D 695
Strength	(12,000 psi)	
Compressive Modulus	1,800 MPa)	ASTM D 695
	(260,000 psi)	
Bond Strength- 2 day	17.25 MPa	ASTM C-882
	(2,500 psi)	
14 day	22.08 MPa	ASTM C-882
	(3,200 psi)	
Absorption,	0.13%	ASTM D 570
% (24 hours)		
Linear Coefficient of Shrinkage	0.004	ASTM D 2566

<b>Component Properties</b>	Resin	Hardener
Mix Ratio	2 PBV	1 PBV
(PBV=Part by volume)		
Appearance	Clear	Amber
Weight	1.15 kg/L	0.98 kg/L
	(9.6 lbs/gal.)	(8.2 lbs/gal.)

Pot Life 0.95 L (1 U.S. qt.) unit @ 25°C (77°F): 30 minutes

Mixed Colour: Medium Amber Mixed Viscosity: CPS 2,000

\*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

**CRACK INJECTING** ... Epoxy can be gravity fed into horizontal cracks that are small, (6.35 mm [1/4"] maximum width) and have a limited depth. For large injection projects, a 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 2.66 m²/L (100 ft.²/U.S. gallon). 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 PROTETIVE TREATMENT. Follow standard epoxy flooring system requirements, including water vapour 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 6 parts sand). Patch thickness should not exceed 101.6 mm (4") per lift.

**Clean Up** ... Clean tools and equipment immediately with Toluene or Xylene. Clean equipment away from all ignition sources and avoid breathing vapours or allowing epoxycontaining solvent to contact skin. Should this material come in contact with the skin, wash thoroughly with soap and water, not solvent.

#### **COVERAGE**

3.8 litres (1 U.S. gallon) neat covers approximately 2.09-2.66 m²/L (85-100 ft.²), depending on the surface porosity and end use application. 3.8 litres (1 U.S. gallon) mixed 1:1 with dry aggregate yields approximately 5,735 cm³ (350 cubic inches) of grout.

#### **PRECAUTIONS**

DO NOT DILUTE. Mix complete units only. Not recommended for use when the concrete temperature is below 4°C (40°F) or will drop below 4°C (40°F) within 24 hours. Do not use to seal cracks under hydrostatic pressure. Do not warm epoxy over direct heat. REZI-WELD LV is not to be used as an exterior coating as it is not colour 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 the heat. Refer to Material Safety Data Sheet for complete health and safety information.

Proper application is the responsibility of the user. Field visits by W. R. MEADOWS' personnel are for the purpose of making technical recommendations only, and are not to supervise or provide quality control on the job-site.

# SPECIFICATION CLAUSE

Section 03 64 23

Crack/Concrete Rehabilitation W. R. MEADOWS' REZI-WELD LV



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