



Product Data Sheet QuakeBond™ 320LV Low Viscosity Resin

DESCRIPTION

QuakeBond™ 320LV (Low Viscosity Resin) is a two-component, high-strength, low-viscosity structural epoxy. The low viscosity makes this an ideal product for crack injection, gravity feed or patching. It can be used as a liquid binder for sand, aggregate or other mineral fillers to form cost-effective material to fill the annular space around piles when PileMedic™ laminates are used. The resin cures underwater, making it suitable for repair of submerged piles. The high compressive and tensile strength of this epoxy provide structural strength for the pile or pole in repairs using PileMedic™ laminates. QuakeBond™ 320LV can be used in repair of concrete, masonry and wood structures. The resin also provides excellent durability and chemical resistance. The convenient 2:1 volumetric mix ratio is user friendly. QuakeBond™ 320LV is a 100% solids formulation with low toxicity and low odor during cure.

USE

- Filling the annular space created between the PileMedic™ and concrete or timber pile or pole being repaired for both above-water and submerged conditions
- As a binder mixed with sand and small-size aggregates to form a resin-based grout to fill larger annular spaces in repair of piles and poles using PileMedic™
- Filling cracks in concrete by injection or gravity feed
- Crack repairs in masonry, wood and concrete structural members
- A moisture barrier (water-proofing) system in conjunction with PileMedic™ laminates

ADVANTAGES

- High strength, high modulus, low-viscosity structural adhesive.
- Moisture insensitive – it cures under water
- Fully compatible and excellent adhesion to PileMedic™ carbon or glass laminates.
- Convenient easy mix ratio, 2:1 by volume.
- 100% solids, VOC free and Butyl Glycidyl Ether (BGE) free.
- Nearly odor-free.

COVERAGE

Apply as a filler material to fill all cracks and voids in concrete, masonry and timber structures. Application rate varies greatly based on the porosity and the volume of voids present in the structural member being repaired. For wider annular spaces, the epoxy can be mixed with clean silica sand and pea gravel (3/8 inch and under) for improved yield.

PACKAGING

Each of the components is supplied in 5-gallon (19L) containers or 55-gallon (208L) drums, resulting in 15-gallon or 165-gallon kits. Ships DOT non-regulated.

MIXING

Mix 2 parts resin "A" to 1 part hardener "B" by volume into a clean container. Mix thoroughly for 3 minutes using a paddle at low speed (400-600 rpm) to avoid air entrainment. Mix only the quantities that can be used within pot life. REMEMBER -- you will have less working time at higher temperatures. **DO NOT THIN**; solvents will prevent proper cure. If desired, silica sand and well-graded pea gravel (3/8 inch and under) can be added up to a maximum of 70 pounds sand and gravel per gallon of QuakeBond™ 320LV.

SHELF LIFE

2 years in original, unopened and properly stored containers.

STORAGE CONDITIONS

Store at 55°-100°F (13°-38°C)

CERTIFICATE OF COMPLIANCE

- Material Safety Data Sheet (MSDS) will be supplied upon request and is included with each shipment.
- ASTM C 881 Compliant

APPLICATION

Properly mixed QuakeBond™ 320LV can be used to fill the annular space between PileMedic™ jackets and the pile or pole being repaired. When introduced at the bottom of the annular space, the high density of the resin pushes the entrapped water to the top. The resin can be thickened with clean silica sand and pea gravel (3/8 inch and under) for filling larger annular spaces. All epoxy components shall be preconditioned to a temperature between 65°F (18°C) and 85°F (29°C) prior to the time of mixing.

LIMITATIONS

Minimum application temperature of the epoxy is 45° F (7°C). DO NOT THIN this epoxy with solvents.

CLEANUP

Uncured materials can be removed with approved solvent or warm soapy water. Cured materials can only be removed mechanically.

SAFETY PRECAUTIONS

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions may cause high vapor concentrations. Do not weld on, burn or torch any epoxy materials as this will cause release of hazardous vapors. Consult MSDS for detailed information.

EPOXY PROPERTIES:		
Color – Both Parts "A" and "B" are amber liquid		
Viscosity Mixed at 77° F (ASTM D-2196)		780 cps
Working Time at 77° F (25° C)		20 minutes
Gel Time		30 minutes
Weight (Mixed) lb/gallon		9.21
Density (Mixed) kg/liter		1.11
Tensile Strength (ASTM D-638)		7,900 psi (54.5 MPa)
Compressive Strength (ASTM D-695)		11,200 psi (77.2 MPa)
Elongation @ Break (ASTM D-638)		4.8%
Adhesion to Concrete		>800 psi (5.5 MPa); 100% failure in concrete
Hardness, Shore D (ASTM D-2240)		86

CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION.

KEEP OUT OF REACH OF CHILDREN.
NOT FOR INTERNAL CONSUMPTION.

FOR INDUSTRIAL USE ONLY.
KEEP CONTAINER CLOSED TIGHTLY.

QuakeWrap, Inc. warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. QUAKEWRAP, INC. SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.