



Product Description

EPIWELD® 9-N-7 is a pre-packaged epoxy and aggregate type patch, grout, and topping products for primarily horizontal substrates. It is designed for use where cement based patches, grouts or mortar compounds are not suitable due to adverse chemical environments such as areas of high acid attack and oil saturation, or where the repair time is very limited before area operations must be resumed.

EPIWELD® 9-N-7 combines a scientifically blended epoxy with a specially graded quartz aggregate. Quartz/silica aggregates are used in EPIWELD® 9-N-7 because they are ideal fillers in epoxy systems. They are oven-dried and especially size graded for a variety of applications.

EPIWELD® 9-N-7 is an epoxy-based system for specialized grouting, including equipment, columns, anchor bolts, base plates, quarry tile, concrete pavers, etc. This product is also used for patching, rebuilding, and surfacing. It provides non-absorbent, dust-free, chemical resistant surfaces for easy maintenance.

Installation

Before using this product, please refer to the Material Safety Data Sheet for additional information. Proper handling precautions MUST be followed. The conditions of use, handling, and application of this product and information (whether verbal or written), including any suggested formulations and recommendations, are beyond Lambert Corporation's control. Therefore, it is imperative that testing be performed to determine satisfaction and suitability for intended use and health, safety, and environmental issues. The following information is meant as a guideline of best industry practices. While Lambert Corporation does suggest adherence to these guidelines, unforeseeable variables and/or developed successful installer practices may cause variation in methods and/or results.

Surface Preparation-Concrete

The success of any application is directly proportional to the completeness of substrate preparation and the care in application. Surfaces must be clean and sound. All concrete surfaces to be bonded, coated or repaired should be dry and above 50°F (10°C) for best results. A slightly damp condition is acceptable under certain conditions. Tests areas are required when this condition exists. Mechanical scuffing to remove laitance and expose sound, coarse aggregate will result in optimum bond. Non-porous, dense or glassy type concrete surfaces must be etched with a solution (10%) of murtatic acid. New concrete needs to be aged/cured before an epoxy is applied (generally 28 days or more).

Cautions - Test Areas

Due to many variables in bonding to damp or dry surfaces, be certain to test application under the same conditions as the full-scale work. When bonding to damp or slightly wet surfaces, test if dampness or moisture is caused by hydrostatic pressure. Moisture passing through the substrate by pressure during application and curing of epoxy will cause bond failures.

Surface Preparation-Steel

Exposed rebar, anchor bolts, etc. to be bonded must be free of rust, paint, oil, and dirt. Metals should be sanded or sandblasted to a commercial blast finish. If mechanical cleaning is impractical, chemical cleaning should be used. Clean, dry, lightly abraded surfaces give a better mechanical key/bond.

Mixing

The Parts-A & B of EPIWELD® 9-N-7 should be thoroughly stirred before the two are mixed together. The resin (Part-A) and hardener (Part-B) should then be mixed in the proper ratio (2 Parts resin-A to 1 Part-B by volume) for 3 to 5 minutes resulting in a homogenous and uniformly colored material. It is recommended that a slow speed drill (600-RPM maximum) and paint paddle or a "jiffy" mixer be used for mixing. Violent mixing creates excessive air entrapment and the potential of air bubbles in the set epoxy. Hand mixing with paint paddle is also acceptable. The paddle should contact the inside surface of the container; the bottom and sides, to assure complete mixing. Mix thoroughly until aggregate is wetted completely and not dry pockets remain. Proportion of aggregate to 1 part mixed epoxy varies with proposed end use. The increase of aggregate in volume will reduce workability - 2 to 3 parts aggregate by volume to 1 part mixed EPIWELD® 9-N-7 is recommended for a better working material.

Caution

Aggregate must be oven dried to avoid encapsulation of moisture into the system which results in a boiling condition at time of mixing. Temperature at time of application should be 50°F (10°C) and rising. Condition components to 60-70°F (15.5-21.1°C) prior to use. Epoxies stored below 60°F (15.5°C) will cause the epoxy to thicken substantially making it difficult to blend the two materials and obtain a proper mating of resin and hardener.

Pot life of mixed EPIWELD® 9-N-7 at 70°F (21.1°C) is about 30 minutes. Pot life is dependent upon material temperature and quantity catalyzed. The greater the mass, the shorter the pot life. Increased mass and temperature result in higher exothermic and shorter pot life. Higher temperatures decrease pot life; lower temperatures and the addition of aggregate lengthen pot life. Temperatures of substrate will have similar results on pot life.

Application

EPIWELD® 9-N-7 can be applied by brush, squeegee, notched trowel, or 3/8-inch (9.5 mm) nap roller.

	<p>Packaging:</p> <p>Pre-Packaged Part A – 2/3-gal (2.5L) Part B – 1/3-gal (1.3L)</p> <p>Part C – 50-lb (22.7kg) Pail</p>
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Patching Compound

After mixing parts A & B together as per instructions, thoroughly blend the selected aggregate into the mixture. For patches greater than 3/4-inch (19.1mm) in depth, coarse aggregate whose maximum size is 1/3 the thickness of the patch may be mixed with the sand used in the epoxy mortar. Deep patches should be applied in 1-inch (25.4mm) increments with subsequent layers applied after the preceding one has cooled to touch but still tacky. Epoxy to aggregate ratios by volume are generally in the range of 1 part mixed epoxy to 2-3 parts aggregate.

Toppings

Surface topping systems are trowelled at a thickness from a nominal 1/8-inch (3.2 mm) up to 1/2-inch (12.7mm). Spread EPIWELD® 9-N-7 between screeds and rake to desired thickness. When larger areas are to be resurfaced, screed strips can be nailed down to create panels approximately 30" (762mm) wide. Placement is then made in alternate panels. As soon as panel surface has been trowelled, remove nailed down screed. During finish troweling, we suggest wiping the trowel with a cloth saturated with lacquer thinner if smooth epoxy finish is desired.

Grout Mix

When used as a grout - pour from one side and fill completely to eliminate entrapped air. Work the grout with rods until total contact is achieved and no air holes exist.

Limitations

Do not thin EPIWELD® 9-N-7. Solvent will prevent proper cure. Do not apply to wet areas. Exposure to temperature (after cure) above 200°F (93.3°C) not recommended. Substrate temperature must not be below 50°F (10°C) during application.

Coverage

Epoxy Patching – Grout Mortar		Yeild per Gallon
Epoxy +	Aggregate =	Mortar/Grout
1 gal (3.8L)	1 gal (3.8L)	1.6 gal (6.1L)
1 gal (3.8L)	2 gal (7.6L)	2.2 gal (8.3L)
1 gal (3.8L)	3 gal (11.4L)	2.8 gal (10.6L)
1 gal (3.8L)	4 gal (15.1L)	3.4 gal (12.9L)

*1 gallon (3.8 liter) of Lambert silica sand weighs approximately 10 to 12 pounds (4.5 to 5.4 kg). All above figures will vary slightly according to aggregate mesh size and air

Binder & Aggregate	Square Feet	Thickness
1 gal (3.8L)	12.8 (1.2m ²)	1/8" (3.2mm)
1 gal (3.8L)	8.6 (0.8m ²)	3/16" (4.8mm)
1 gal (3.8L)	6.4 (0.6m ²)	1/4" (6.4mm)
1 gal (3.8L)	4.3 (0.4m ²)	3/8" (9.5mm)
1 gal (3.8L)	3.2 (0.3m ²)	1/2" (12.7mm)
1 gal (3.8L)	1.6 (0.15m ²)	~1" (25.4mm)

Clean-Up

Clean all tools and equipment immediately after use with lacquer thinner. Do not allow epoxy to harden on tools or equipment. Soap and hot water may be used in some cases.

First Aid

Avoid breathing possible fumes, mists and vapors that can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective creams is required. If material gets into eyes, flush thoroughly with clean water for (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safely precautions. It is important when using solvent-based materials or solvents to keep away from open flame or ignition source.

**KEEP OUT OF REACH OF CHILDREN.
FOR INDUSTRIAL USE ONLY.**