



LIFELAST[®]
Innovation Through Formulation

PRIMALL-160 EPOXY PRIMER

TECHNICAL DATA SHEET

EFFECTIVE: 6/24/2019

PRODUCT DESCRIPTION

CHEMICAL DESCRIPTION

Amine-cured Epoxy

USAGE

Primall-160 is a 99+% solids, two-part epoxy primer for use on steel, aluminum, galvanized steel, stainless steel, concrete, wood, composite plastics and masonry. Primall-160 has excellent adhesion to a variety of substrates, including damp and green concrete. Formulated to provide a chemical bond with LifeLast urethanes, Primall-160 improves the overall adhesion of the system and minimizes moisture and out-gassing considerations. Unlike other epoxy priming systems, Primall-160 has an extraordinarily long open time for chemical adhesion with LifeLast polyurethane topcoats. The use of Primall-160 is strongly recommended when using LifeLast polyurethanes on porous substrates like concrete, wood and fiberglass. Application is accomplished by hand, using brush, roller or rag or it can be sprayed (hot-potted) and back-rolled.

COLOR

Amber

QUALIFICATIONS

Certified for use as a priming system for LifeLast DuraShield 210, 310 and 320 in FDA approved dry bulk applications and USDA incidental contact environments

TYPICAL APPLICATIONS

- Concrete primer
- Wood primer
- Primer for stainless and galvanized steels, and aluminum
- Fiberglass
- Concrete sealer

PRODUCT ADVANTAGES

EXCELLENT ADHESION

Bonds to a variety of substrates

HIGH BOND STRENGTH

Even to SSD (saturated surface dry) or green concrete

VERY GOOD CHEMICAL RESISTANCE

Withstands most concentrated acids and bases

LONG OPEN TIME FOR RECOATING

EXCELLENT MOISTURE TOLERANCE

SEALS POROUS SUBSTRATES

Reduces pinholes in concrete, wood and fiberglass applications

CHEMICAL BOND WITH LIFELAST POLYURETHANES

Provides uncompromising adhesion to topcoat

NO INDUCTION TIME REQUIRED

NON-TOXIC AND NON-CORROSIVE

COATING SYSTEMS

TOPCOATS

LifeLast DuraGard and DuraShield polyurethanes

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TECHNICAL DATA

PHYSICAL PROPERTIES		
Test	Standard	Result
Adhesion: White Blasted Steel Concrete, Dry Concrete, Damp	ASTM D4541	> 1500 psi Concrete Failure Concrete Failure
Tensile Strength	ASTM D412	4100 psi
Elongation at Break	ASTM D412	5%
Hardness, Shore D	ASTM D2240	76±3

CURE TIME

Temperature	Dry To Touch	Minimum Recoat Time	Maximum Recoat Time*
77°F (25°C)	8 hrs	8 hrs	<5 days
42°F (6°C)	20 hrs	20 hrs	<5 days
125°F (52°C)	3 hrs	3 hrs	<5 days

* In clean environments. An acetone wipe may be required if primer is applied in areas exposed to contaminants.

APPLICATION

SURFACE PREPARATION

Preparation requirements vary with application. Refer to the *Application Specification Sheet* for the LifeLast topcoat being applied or contact your LifeLast technical representative for assistance.

MIXING

Primall-160 is supplied in pre-measured kits. Pour the entire contents of the curative bucket into the resin container and mix using a “Jiffy” mixer or similar. Mix thoroughly, but avoid adding air to the mixture. Scrape the sides and bottom of the bucket during mixing.

POT LIFE (70°F, 21°C)

- 100 gram mass: 40 minutes
- 2 mixed gallons: 30 minutes
- 4 mixed gallons: 20 minutes

SUBSTRATE TEMPERATURE

Min: 40°F (4°C); Max: 120°F (49°C); surface should be properly prepared and more than 5°F (-15°C) above dew point.

AMBIENT CONDITIONS

- Min: 40°F (4°C); Max: 120°F (49°C)
- Relative humidity should be less than 85%. Ambient air temperature must be no less than 5°F (-15°C) above the dew point.

THINNING

None required or recommended.

SPRAY APPLICATION

- Use 30:1 or larger, single component airless.
- 1/4” or larger spray line; 0.015-0.025” spray tip.
- Mix only what can be applied in under 10 minutes.
- Recommend back-rolling primer when applied to porous substrates.

TOPCOAT APPLICATION

- Primer must be dry-to-touch prior to topcoat application.
- Primer may blush when curing in cold temperatures, high humidity and/or high carbon dioxide conditions. Blush must be removed prior to application of the topcoat. See the Primall-160 Application Specification for more details.

SOLIDS

99.2% by volume

MIX RATIO

1.61 : 1 (Resin : Curative) by volume

1.84 : 1 (Resin : Curative) by weight

RECOMMENDED DRY FILM THICKNESS

2-20 mils wet/dry mils, substrate dependent

COVERAGE

- Metal Substrates & Fiberglass:
 - ◊ 190-375 ft²/gallon @ 2-8 mils
- Concrete, Wood, & Masonry:
 - ◊ 75-250 ft²/gallon @ 2-20 mils

NET WEIGHT PER GALLON

- Resin: 9.4 lbs/gallon
- Curative: 8.2 lbs/gallon
- Mixed: 8.9 lbs/gallon

SHELF LIFE

12 months at recommended storage temperatures.

STORAGE

- Temperature:
 - ◊ Resin: Min 40°F (4°C), Max 90°F (32°C)
 - ◊ Curative: Min 40°F (4°C), Max 90°F (32°C)
- Containers must be kept sealed in a dry environment.

SHIPPING INSTRUCTIONS

Unheated trailer, no special requirements. Keep dry.

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