



**PRODUCT DESCRIPTION**

**CHEMICAL DESCRIPTION**

Amine-cured Epoxy

**PRODUCT USAGE**

Primall-160 is a 100% 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 urethane topcoats. The use of Primall-160 is strongly recommended when using LifeLast urethanes on porous substrates like concrete and wood. Application is accomplished by hand, using brush, roller or rag and can be sprayed (hot-potted) and back-rolled.

**COLORS**

Light to dark amber.

**PRODUCT CERTIFICATIONS**

Certified for use as a priming system for LifeLast DuraShield 310, 320 and 360 in FDA dry-bulk storage applications and USDA incidental contact environments.

**PRODUCT ADVANTAGES**

- Excellent adhesion to a variety of substrates
- High bond strength to damp and green concrete
- Excellent chemical resistance
- Long open time for recoating
- Excellent moisture tolerance
- Low water permeability
- Minimizes out-gassing of urethane topcoats
- Good flexibility
- Chemical bond with LifeLast urethanes for uncompromising adhesion

**TYPICAL APPLICATIONS**

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

**SURFACE PREPARATION**

Preparation requirements vary with application. Refer to the general application specification sheet for the LifeLast topcoat being applied or contact your designated LifeLast technical representative for assistance.

**COATING SYSTEMS**

**TOPCOATS**

LifeLast DuraGard and DuraShield urethanes

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## TECHNICAL DATA

**SOLIDS VOLUME** 100 percent

**MIX RATIO BY VOLUME** 1.61 : 1 (Resin : Curative)  
**BY WEIGHT** 1.84 : 1 (Resin : Curative)

**RECOMMENDED THICKNESS** 4-20 wet/dry mils.

CURE TIME	Temperature	Dry To Touch	Dry to Topcoat	Open Time	To Normal Use
	70 °F	9 hours	9 hours	< 5 days	24 hrs.

**COVERAGE** **Metal Substrates & Fiberglass:** 160-270 ft<sup>2</sup>/gallon @ 4-8 mils  
**Concrete, Wood & Masonry:** 75-190 ft<sup>2</sup>/gallon @ 8-20 mils

**NET WEIGHT PER GALLON** **Resin:** 9.37 lbs/gallon, **Curative:** 8.19 lbs/gallon; **Mixed:** 8.92 ± 0.20 lbs/gallon

**STORAGE TEMPERATURE** **Resin:** Min 40 °F, Max 90 °F; **Curative:** Min 40 °F, Max 90 °F

**SHELF LIFE** 6 months at recommended storage temperatures.

**HEALTH AND SAFETY** Consult Material Safety Data Sheets (MSDS) prior to handling or applying.

PHYSICAL PROPERTIES	
Adhesion to White-blasted Steel	>3000 psi
Adhesion to Concrete, Dry	Concrete failure
Adhesion to Concrete, Damp	Concrete failure
Tensile Strength (ASTM D-412)	4100 psi
Elongation at Break (ASTM D-412-87)	5-8%
Hardness, Shore D (ASTM 2240-86),	76±3
Service Temperature	<u>Dry</u> – Continuous: -40°F to 200 °F Maximum Surge: 350 °F <u>Immersion</u> – Insulated (max): 140 °F Non-Insulated: 120 °F

## APPLICATION

**MIXING** Mix resin and curative 1.61 to 1, respectively, by volume in a clean container using a “Jiffy” mixer or similar equipment. Mix thoroughly, but avoid excessive mixing, which introduces additional air into the coating.

**POT LIFE (70 °F)** 100 g mass ≈ 50 minutes  
 2 mixed gallons ≈ 40 minutes  
 4 mixed gallons ≈ 30 minutes

**SUBSTRATE TEMPERATURE** Min 45 °F, Max 120 °F; Surface should be properly prepared and more than 5 °F above dew point. Ambient air temp must be no less than 5°F above dew point.

**THINNING** None required or recommended

**SPRAY EQUIPMENT** **Airless:** 30:1 ratio with ¼” hose; Graco RAC V tips, 0.015” to 0.025” at >2000 psi

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