



# Highland International, Inc.

## Engineered Paint Systems

### HiGrip 97 Series Epoxy Mastic Primer/DTM

**HiGrip 97 Series** is a surface tolerant 2-component Direct to Metal Epoxy Mastic Primer/DTM specifically formulated to alleviate extensive surface preparation. HiGrip may be applied over slightly damp and minimally prepared surfaces (rusty steel and deteriorated previously painted surfaces). HiGrip dries to a semi-gloss finish and may be applied up to 8 dry mils per coat. A complex rust inhibitor and resin system serves to assure excellent chemical and atmospheric corrosion protection in a single coat system. 97 Series may be topcoated with urethanes, epoxies, alkyds, silicone alkyds and acrylics.

**Vehicle Type:** Polyamine Adduct Epoxy  
**Pigmentation:** Lead Free  
**Reducer:** Not Necessary  
**Reduce if Desired:** Use 901 (up to 10% for spray application)  
**Mixing Ratio:** 1:1 (1 part base to 1 part activator)  
**Pot Life:** 4 Hours @ 77°F (Decreases at higher temperatures)

**Volume Solids:** 70%  
**Theoretical Coverage:** 1120 ft<sup>2</sup>/gal. @ 1mil DFT  
**VOC:** <250 g/L  
**Flash Point:** 16°F (Lowest Flashing Component)  
**Recommended DFT:**  
**Normal Conditions:** 4-8 mils DFT = 6 – 11.5 wet mils

**Excellent Protection in Aggressive or Severe Chemical or Atmospheric Conditions:** 8-14 mils DFT = 11.5- 20 wet mils in 2 coats

**Dry-time:**  
**Dry times are temperature, humidity & film thickness dependent**

<b>To Touch:</b>	1-2 hours
<b>Tack Free:</b>	2-3 hours
<b>Recoat:</b>	2 hours (Maximum 5 days)
<b>Topcoat:</b>	4 hours (Maximum 5 days)
<b>To Handle:</b>	6 Hours
<b>Complete Cure:</b>	5 Days @ 77°F
<b>Put in Service:</b>	12 Hours (normal conditions) 24 hours (mild chemical conditions) 5 days (severe chemical conditions)

**Shelf Life:** 2 Year Minimum  
**Finish:** Semi-Gloss  
**Color:** Selected Range

#### Recommended Systems

<u>Primer</u>	<u>Topcoat</u>
97 Series 4-8 mils	Aero-Shield 58 Series Urethane 2-3 mils Or HiShield 36 Series Urethane 2-3 mils Or HiShield Dry-Fall 68R Series Urethane 2-3 mils
97 Series 4-8 mils	HiCryl 37 Series Acrylic Alkyd 2-3 mils Or 65-R Series Dry-Fall Acrylic 2-3 mils
97 Series 4-8 mils	HiGlo 150C Alkyd 2-3 mils

#### Surface Preparation

- 1) Surface preparation should be in accordance with SSPC-SP6 Commercial Blast cleaning. When blast cleaning is not an option, SSPC-SP3 Power Tool or SSPC-SP2 Wire Brushing is acceptable and provides good results. Also Water Jetting in accordance with SSPC-SP12 is acceptable.
- 2) All Surfaces to be painted should be dry and free of all foreign contaminants.

#### Mixing and Application Requirements

- 1) Mix entire contents of part "A" Activator with part "B" Base (1 to 1 by volume).
- 2) Mixed material is ready for use **after a 15 minute induction period.**
- 3) Apply at a rate 140-280 square ft. per gallon to achieve recommended TDFT of 4-8 mils
- 4) Apply at a rate of 80 to 140 square ft. per gallon to achieve recommended TDFT for severe or aggressive conditions
- 5) Topcoat with Highland #36 Series, #37 Series, #65R Series, #68R Series, #97 Series, #150 Series, or #865 Series.

#### Method of Application

**Conventional Gun:** DeVilbiss MBC-510  
**Fluid Tip:** E  
**Air Cap:** 704  
**Atomizing Pressure:** 60 psi  
**Pot Pressure:** 15-20 psi  
**Hose:** ½ inch ID

**Airless Gun:** Graco 205-591  
**Pump:** 30:1/45:1/60:1, Gas Pump Acceptable  
**Tip Range:** 3.011– 5.017  
**Pump Pressure:** 1800 psi minimum  
**Hose:** 3/8 inch ID

**Brush or Roller:** Natural or synthetic bristle  
**Clean Up:** Clean all equipment with lacquer thinner

#### Safety Precautions

- 1) Use normal precautions such as gloves, facemasks and barrier creams.
- 2) Adequate ventilation must be maintained. In confined areas, workmen must wear constant flow airline respirators.
- 3) If product comes into contact with skin, wash thoroughly with lukewarm water or diluted Boric Acid, and obtain immediate medical attention.
- 4) This product contains **FLAMMABLE** materials. Keep away from sparks and open flames. Observe **NO SMOKING** regulations.
- 5) All electrical equipment and installations should conform to NEC regulations. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools, and to wear conductive, non sparking shoes.
- 6) Observe low flash regulations.
- 7) Refer to Material Safety Data Sheet (MSDS) for complete safety instructions.

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