

# 77-HF Series

## HiGrip 2 Component Primer/DTM



HiGrip 77-HF Series is a 2-component epoxy specifically formulated to alleviate extensive surface preparation. It may be applied over minimally prepared surfaces (rusty steel and deteriorated previously painted surfaces). HiGrip dries to a flat finish that may be applied up to 6 dry mils per coat. A complex rust inhibitor and resin system serves to assure excellent corrosion protection and adhesion. HiGrip 77-HF Series also serves as an excellent tie-coat between Highland zinc-rich primers and Highland topcoats. It may be topcoated with Highland alkyds, silicone alkyds, acrylics, epoxies, and urethanes.

### Tech Specs

<b>Heat Resistance:</b>	200°F Constant
<b>Vehicle Type:</b>	Polyamide Adduct Epoxy
<b>Reducer:</b>	Not Normally Required
In summer if desired:	Highland #100 Reducer
In Winter if desired:	Highland #120 Reducer
Hot Application:	101A Hot App. Reducer
<b>Mix Ratio:</b>	1:1 Base to Activator
Base:	77-HF-####
Activator:	77-AHF-100
<b>Pot Life:</b>	6 Hours @ 77°F (Decreases in higher temperatures)
<b>Volume Solids:</b>	55%
<b>Theoretical Coverage:</b>	882ft <sup>2</sup> /gal. @ 1 mil DFT
<b>VOC:</b>	<331 g/L (<2.76 lbs/mixed gal.)
<b>Flash Point:</b>	54°F (Lowest Flashing Component)

<b>Dry Film Thickness:</b>	2-3 mils DFT for normal conditions 4-6 mils DFT for immersion or other severe conditions.
<b>Wet Film Thickness:</b>	3.6-5.5 mils WFT per coat
<b>Dry-time:</b>	<b>Normal</b>
To Touch:	3-4 Hours
Tack Free:	4 Hours
To Recoat:	3 Hours
To Handle:	6-8 Hours
Put in Service:	12 Hours
<b>Shelf Life:</b>	2 Years Minimum
<b>Finish:</b>	Flat
<b>Color:</b>	Standard & Custom
<b>Packaging:</b>	10 Gallon Kits
<b>Storage Temperature:</b>	20°F - 110°F

### Surface Preparation

All surfaces should be clean, dry and free of all foreign contaminants.  
A SSPC-SP1 Solvent Cleaning with Highland 901 Cleaning Solvent is recommended before blasting or other cleaning method.

#### Carbon Steel - Immersion:

Obtain a 2-3 mil angular blast profile using one of the recommended methods below.

**Best:** A SSPC-SP5/NACE 1 White Metal Blast Cleaning is recommended for maximum coating performance and longevity.

**Good:** A SSPC-SP10/NACE 2 Near White Metal Blast Cleaning provides good results.

#### Carbon Steel - Non-Immersion:

Obtain a 2-3 mil angular blast profile using one of the recommended methods below.

**Best:** A SSPC-SP6/NACE 3 Commercial Blast Cleaning provides good results.

**Good:** A SSPC-SP3 Power Tool Cleaning, SSPC-SP2 Hand Tool Cleaning, or waterjetting per SSPC-SP 12 to WJ-4 will provide good results.

## Galvanized Steel:

Contact a Highland representative as recommendation will vary depending on substrate and exposure conditions.

## Mixing & Application

**Mixing:** Highland 77 Series needs to be thoroughly mixed using mechanical agitation. Mix entire contents of Part "A" Activator (77-AHF-100) with Part "B" Base (77-HF-####) (1:1 by volume). Mixed material is ready for use after a 30 minute induction period.

**Reduction:** Reduction is not required for standard applications, If desired, reduce by 0% - 10% with Highland 100 or 120 reducer.

**Hot Application:** For Hot Application on surfaces up to 175 ° F, reduce 5% with Highland 101A Hot Application Reducer immediately after the 30 minute induction period.

For Hot Application, apply in multiple coats at 1.5 to 2.0 mils DFT per coat (max) to achieve the desired total DFT. Wait 1 hour between coats and no longer than 24 hours between coats.

Highland 77 Series is designed for spray application. To ensure optimal performance, apply according to the following recommendations.

### Airless

**Gun:** Graco 205-591 (or equivalent)

**Pressure:** Apply at 2100psi to achieve an even fan pattern.

**Tip sizes:** 3.013-4.015

**Airless Pumps:** 30:1, 45:1, 60:1

**Hose:** 1/2 inch ID

**Brush or Roller:** Both are acceptable for touch up. For complete projects use the 77-BR formula.

### Conventional

**Gun:** DeVilbiss MBC-510 (or equivalent)

**Fluid Tip:** E

**Atomizing Pressure:** 70 psi

**Pot Pressure:** 15-20 psi

**Hose:** 1/2 inch ID

**Clean Up:** Clean all equipment with Highland #901 Cleaning Solvent

## Typical Systems

Highland 77 Series may be topcoated with a variety of Highland Primers:

Apply 1 coat of 77 Series at 2-3 mils DFT as a primer then topcoat with one of the following options.

36 Series Topcoat	Ultra-High gloss 2K urethane
150 Series Topcoat	High gloss single component alkyd
65R Series Topcoat	Dry-Fall gloss acrylic
68R Series Topcoat	Dry-Fall high gloss urethane

Highland 77 Series may be topcoated with a variety of Highland Topcoats. Contact your Highland representative for more details.

## Safety Information

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

The technical data listed herein has been compiled for your convenience and guidelines are based upon our experience and knowledge. However, since we have no control over the use of this information or this product, no warranty expressed or implied is intended or given. Highland assumes no responsibility whatsoever for coverage, performance or any other damage, including injuries from use of this information or products recommended herein.