



# Highland International, Inc.

## Engineered Paint Systems

### HiTemp 48 Series 450°F Insulation Epoxy Primer

**HiTemp 48 Series 450°F Insulation Epoxy Primer** is a high build surface tolerant 2-K hybrid epoxy novolac that is specifically formulated to provide exceptional temperature insulation and heat reduction properties, as well as exceptional chemical and corrosion protection. It is an excellent choice for priming under insulation when maximum temperature and corrosion protection is needed. 48 Series may be applied at 12 mils DFT per coat to achieve the recommended film thickness. When applied at 12 mils DFT on 450°F surfaces, it will lower the surface temperature by 130°F. With the proper reducer selection, this product can be modified so that it may be applied directly to hot surfaces up to 400°F.

<b>Vehicle Type:</b>	Hybrid Epoxy Novolac	
<b>Pigmentation:</b>	Lead Free	
<b>Reducer:</b>	Not Normally Required	
<b>Reducer for Hot Application:</b>	Highland #101A Reducer	
<b>Mix Ratio:</b>	4:1 w/48-AHF-100	
<b>Pot Life:</b>	3 Hours @ 77°F (Decreases at higher temperatures)	
<b>Volume Solids:</b>	70%	
<b>Theoretical Coverage:</b>	1120 ft <sup>2</sup> /gal. @ 1mil DFT	
<b>VOC:</b>	<275 g/L	
<b>Flash Point:</b>	24°F (Lowest Flashing Component)	
<b>Recommended DFT:</b>	10-14 mils DFT (12 mils DFT optimal efficiency)	
<b>Dry-time:</b>	<b>Normal</b>	<b>Hot Application</b>
<b>Recoat:</b>	3-72 Hours	30 Seconds
<b>Topcoat:</b>	4-72 Hours	30 Seconds
<b>To Handle:</b>	16 Hours	N/A
<b>Put in Service (Heat)</b>	24 Hours	N/A
<b>Cure Time:</b>	5-7 Days @ 77°F	
<b>Shelf Life:</b>	1 Year from DOM	
<b>Finish:</b>	Semi-gloss	
<b>Color:</b>	Gray	

#### Preparation

- 1) Surface preparation should be in accordance with SSPC-SP6 Commercial Blast Cleaning with 2-3 mil jagged steel profile. When abrasive blast cleaning is not an option, SSPC-SP3 Power Tool or SSPC-SP2 Hand Tool Cleaning are acceptable and provide good results. SSPC-SP12 Water-jetting is also acceptable.
- 2) All surfaces to be painted should be clean, dry and free of all foreign contaminants.

#### Mixing and Application Requirements

- 1) Mix 1 Part "A" Activator with 4 parts "B" Base by volume
- 2) Mixed material is ready for use after a 30 minute induction period.

3) Apply in 1-2 coats (5-7 mils DFT per coat) at a rate of 80-112 square feet per gallon to obtain the recommended total dry film thickness of 10 to 14 mils. Apply 12 mils total DFT to obtain optimum cost efficiency.

4) The second coat/topcoat must be applied within 72 hours @ 77°F or the surface will need to be scuffed.

#### Special Notes for Hot Surface Application

HiTemp 48-HF Hot Application formula may be applied directly to hot surfaces not exceeding 400°F.

1) Mix entire contents of Part "A" 48-AHF-100 Activator with Part "B" Base (4 to 1 by volume).

2) Mixed material is ready for reduction after a 30 minute induction period.

3) Reduce 20% with Highland #101 Hot Application Reducer immediately after the 30 minute reduction period.

4) Apply in multiple successive coats not exceeding 2-3 mils DFT per coat to achieve the recommended film thickness.

#### Method of Application

<b>Conventional Gun:</b>	DeVilbiss MBC-510
Fluid Tip:	E
Air Cap:	704
Atomizing Pressure:	70 psi
Pot Pressure:	15-20 psi
Hose:	½ inch ID

<b>Airless Gun:</b>	Graco 205-591
Pump:	30:1/45:1/60:1, gas driven pump
Tip Range:	3.015 – 4.017
Pump Pressure:	2100 psi minimum
Hose:	3/8 inch ID
Brush or Roller:	Natural or synthetic bristle
Clean Up:	Clean all equipment with MEK

#### 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 (MSDS) for complete safety instructions.

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