



Highland International, Inc.

Engineered Paint Systems

HiTemp 805-LH Series 1000°F Modified Silicone Copolymer Topcoat

HiTemp 805-LH Series Topcoat is a single package modified silicone copolymer coating available in a variety of colors. It is designed to exceed conventional high temperature paint products in temperature cure requirements, heat stability (thermal shock), corrosion resistance, color purity, and ease of application. These qualities make 805-LH Series an excellent choice for high temperature painting in power plants, refineries, and other components/areas that see elevated temperatures up to 1000°F.

NOTE: This product will not completely cure until it is exposed to the proper heat requirements (see **Cure Requirements** below). Also, excessive DFT could result in blistering or delamination of the coating.

Vehicle Type:	Modified Silicone Copolymer	
Pigmentation:	Lead Free, Heat Stable Extenders	
Reducers:	Not Normally Required	
In summer if desired:	Highland #100 Reducer	
In winter if desired:	Highland #120 Reducer	
Mix Ratio:	Single Package	
Pot Life:	Not Applicable	
Volume Solids:	45% (+/- 2%)	
Theoretical Coverage:	800-830 ft ² /gal. @ 1 Mil DFT	
Flash Point:	-8°F (Lowest Flashing Component)	
Recommended DFT:	Topcoat 2-3 mils	
Dry-time:	Normal	Hot Application
To Touch:	15 minutes	N/A
Tack Free:	30 Minutes	N/A
To Recoat:	1-2 Hours	N/A
To Handle	1-2 Hours	N/A
Put in Service:	12Hours	
VOC:	<420 g/L	
Shelf Life:	1 Year from DOM	
Finish:	Flat	
Color:	Selected Range	
Cure Time:	24 Hour Ambient Flash	
	4 Hour min @ 250°F to max 500°F	
	1 hour min @ 350°F to max 500°F	

Typical Systems

<u>Primer</u>	<u>Topcoat</u>
15-ZN Silicone Zinc Primer (2-4 mils) 250-1000°F	805-LH Topcoat (2-3 mils)
335 Inorganic Zinc Primer (2-4 mils) 750°F	805-LH Topcoat 2-3 mils)
47 Chem-Temp Epoxy (8-16 mils) 500°F	805-LH Topcoat 2-3 mils)

Performance Data

Thermal Shock (ASTM D2485)	1200°F	Excellent (Several Cycles)
Pull- Off Adhesion (ASTM D4541)	800 psi	

Surface Preparation

- 1) All surfaces to be painted should be dry and free of all foreign contaminants.
- 2) Apply over desired primer (See Typical Systems)

Mixing and Application Requirements

- 1) Stir product thoroughly prior to use
- 2) Apply in one single coat at a rate of 240 to 360 square feet per gallon to obtain the recommended film thickness of 2-3 mils (4-6 wet mils).

Method of Application

Conventional Gun:	DeVilbiss MBC-510
Fluid Tip:	E
Air Cap:	704
Atomizing Pressure:	60 psi
Pot Pressure:	15-20 psi
Hose:	3/8 inch ID
Airless Gun:	Graco 205-591
Pump:	30:1/45:1/60:1
Tip Range:	3.011 – 4.013
Pump Pressure:	1800 psi minimum
Hose:	3/8 inch ID
Brush or Roller:	Touch Up Only
Clean Up:	Highland 901 HAPs Free Solvent

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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