



Highland International, Inc.

Engineered Paint Systems

HiTemp 810-HF Series 1200°F Silicone Copolymer DTM/Topcoat

810-HF Series HiTemp is the result of extensive research and testing into maximum paint performance under extremely elevated temperatures. It has excellent adhesion to steel surfaces and provides corrosion protection on surfaces with temperatures up to 1200°F.

NOTE: This product will not completely cure until exposed to proper heat requirements (see Cure Time below). Also excessive DFT may result in bubbles or delamination of the coating.

Vehicle Type:	Silicone Copolymer
Pigmentation:	Special heat resistant extenders
Reducer:	Not Normally Required
Mix Ratio:	Single Package
Pot Life:	Not Applicable
Volume Solids:	42%
Theoretical Coverage:	672 ft ² /gal. @ 1 Mil DFT
Flash Point:	-8°F (Lowest Flashing Component)
Recommended DFT:	2-5 mils as a DTM 2-3 mils as a Topcoat

Dry-time:

To Touch:	30 minutes
Tack Free:	1 Hour
To Recoat:	1-2 Hours
To Handle	1-2 Hours
Put in Service:	12 Hours

VOC:	3.5 lbs per gallon (419 grams/liter)
Shelf Life:	1 Year from DOM
Finish:	Flat
Color:	Black
Cure Time:	4 Hrs. @ minimum 250°F to Max. 500°F or 1 Hr. minimum at Maximum 500°F

Surface Preparation

- 1) All surfaces to be painted should be dry and free of all foreign contaminants.
- 2) Minimum acceptable surface preparation should be in accordance with SSPC-SP6 Commercial Blast.
- 3) A low profile blast (1.0 to no more than 1.5 mils) is preferred.
- 4) Apply directly to steel in two coats to achieve proper DFT or apply over #830 or #860 HiTemp Primer for temperatures up to 400°F.

For extra durability and corrosion protection apply over #47 Chem-Temp Epoxy Hybrid for temperatures up to 500°F, #15-ZN Modified Silicone-Zinc Primer or #335 HiZinc Primer for temperatures up to 1000°F.

Mixing and Application Requirements

- 1) Stir product thoroughly prior to use
- 2) Apply at a rate of 135-224 square feet per gallon to obtain the recommended film thickness when using as a DTM.
- 3) Apply at a rate of 224-336 square feet per gallon to obtain the recommended film thickness when using as a topcoat.
- 4) Do not heat cure between coats.

SPECIAL NOTES: When using as a topcoat apply no more than 2-3 mils DFT. To prevent delamination and/or gas bubbles do not exceed a total dry film thickness of 5 mils when applying as a topcoat or DTM. Allow 12 hours after application before heat cure.

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, Gas Pump is Acceptable
Tip Range:	3.011 – 4.013
Pump Pressure:	1800 psi minimum
Hose:	3/8 inch ID

Brush or Roller:	Touch Up Only
Clean Up:	Clean all equipment 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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