



Highland International, Inc.

Engineered Paint Systems

HiTemp 899 Series HiBuild 1000°F Modified Silicone Copolymer DTM/Topcoat

899 Series is a single package modified silicone copolymer coating that may be applied up to 8 mils in 1 coat, providing premium temperature and **corrosion resistance** as well as outstanding adhesion to minimally prepared surfaces. It exceeds conventional high temperature paint products in temperature cure requirements, heat stability (thermal shock), corrosion resistance, color purity, and ease of application. These qualities make the 899 Series an excellent choice for high temperature painting in power plants, refineries, and other components/ areas that see elevated temperatures up to 1000°F. 899 Series is the only 1000°F Direct-To-Metal product available in a variety of colors.

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| Vehicle Type: | Modified Silicone Copolymer |
| Pigmentation: | Lead Free, Heat Stable Extenders |
| Reducer: | Not normally required |
| Warm Weather > 80°F: | Highland #899-S |
| Cold Weather < 80°F: | Highland #899-F |
| Mix Ratio: | Single Package |
| Pot Life: | Not Applicable |
| Volume Solids: | 52 +/- 2% |
| Theoretical Coverage: | 834 ft ² /gal @ 1 mil DFT |
| Flash Point: | 54°F (Lowest Flashing Component) |
| Recommended DFT: | DTM: 6-8 mils DFT in one coat Topcoat: 2-3 mils DFT in one coat |
| Dry-time: | |
| To Touch: | 15 minutes |
| Tack Free: | 30 minutes |
| To Recoat: | Not Applicable |
| To Handle | 4-6 Hours |
| Put in Service: | 24 Hours |
| VOC: | 3.32 lbs per gallon (398 grams/liter) |
| Shelf Life: | 2 Year from DOM |
| Finish: | Flat |
| Color: | Selected Range of Standard and Custom Colors |
| Cure Time: | 18-24 hour ambient flash No heat cure schedule required Complete cure achieved at 350°F |

Surface Preparation

All surfaces to be painted should be dry & free of all foreign contaminants. Minimum acceptable surface preparation should be in accordance with SSPC-SP6 Commercial Blast. A 1-2 mil jagged profile is recommended. When blast cleaning is not an

option, SSPC-SP3 Power Tool or SSPC-SP2 Hand Tool Cleaning is acceptable and provides good results.

899 Series may be applied direct-to-metal or over either of the following Highland International primers:

- a) 827-HB HiTemp High Build Primer
- b) 15-ZN HiTemp Silicone Zinc Primer

Mixing and Application Requirements

- 1) Stir product thoroughly prior to use
- 2) Apply at a rate of 104-139 square feet per gallon to obtain recommended 6-8 mils dry film thickness (12-16 wet mils) for DTM applications or 2-3 mils dry film thickness (4-6 wet mils) as a topcoat.

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 Gas Pump is Acceptable
 Tip Range: 3.011 – 4.013
 Pump Pressure: 1800 - 2100 psi minimum
 Hose: 3/8 inch ID

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