

1400-MIL Series

HiTemp 1400°F Pure Silicone DTM Coating



Highland 1400-MIL is based on a 100% silicone resin with special ceramic colorants. This HAPs free coating utilizes special pigments to achieve maximum heat resistant properties and color stability. Highland 1400-MIL conforms to Mil Spec MIL-P-14105E.

Tech Specs

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| Heat Resistance: | 1400°F Constant |
| Vehicle Type: | 100% Silicone |
| Reducer: | Highland #1400 Reducer |
| Mix Ratio: | Single Package |
| Pot Life: | N/A |
| Volume Solids: | 49% |
| Theoretical Coverage: | 786ft ² /gal. @ 1 mil DFT |
| VOC: | less than 3.5 lbs/gal (420 g/l) |
| Flash Point: | 40°F (Lowest Flashing Component) |
| Dry Film Thickness: | 1.5 mils DFT |
| Wet Film Thickness: | 3.1 mils WFT |

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| Dry-time: | Normal |
| To Touch: | 30 Minutes – 1½ Hours |
| To Handle: | 24 hours |
| Cure Requirements: | 1 hour @ 350°F |
| Hot Application: | N/A |
| Shelf Life: | 2 Years Minimum |
| Finish: | Flat |
| Color: | Black, Dark Gray, Green, Tan |
| Packaging: | 1, 5, & 55 gallon containers |
| Storage Temperature: | 40°F - 100°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:

Best: A SSPC-SP 10 Near White Metal Blast to achieve a low blast profile of .5-1 mil is recommended

Good: A SSPC-SP6 Commercial Blast will provide good results in most situations.

Acceptable: While abrasive blast cleaning is preferred, when it is not an option, Hand or Power Tool Cleaning per SSPC-SP3 may be used and will provide good results.

Stainless Steel:

Surface must be clean and dry. Remove all oil, grease, soil, drawing and cutting compounds and other foreign matter by solvent cleaning per SSPC-SP1.

Mixing & Application

Mixing: Highland 1400-MIL Series needs to be thoroughly mixed using mechanical agitation. It is ready to spray after proper mixing.

Reduction: Reduction is not required, if desired, reduce by 0% - 10% with Highland #1400 reducer.

Standard Airless Applications

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| Airless Gun: | Titan 740 Impact or equivalent |
| Pump Pressure: | 2500 PSI |
| Manifold Filter: | 100 Mesh |
| Gun Filter: | 100 Mesh |

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| Hose: | 1/4 inch ID |
| Gun: | LX-8011 or equivalent |
| Tip Range: | .015 - .019 |

Recommended Uses

Highland 1400 MIL is recommended for use wherever resistance to heat, humidity and corrosive atmospheric conditions is required. Can be used as a protective and decorative coating on heaters, stacks, boilers, breeches, mufflers, radiators, storage tanks, pipelines, steam lines, etc., where operating temperature will not exceed 1400°F (760°C).

Performance

This 100% silicone based coating, is able to withstand severe thermal cycling to 1400°F and can be applied directly to clean steel. It has the unique ability to be handled in the air dry state. It has good color stability to 1000°F (538°C); Black to 1400°F (649°C), excellent heat resistant properties, excellent weathering characteristics and good corrosion protection.

Typical Systems

DTM Services: Apply 1 coat of 1400-MIL Series at 1.5 mils DFT in a single uniform coat.

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