

1400-DTM Series

HiTemp 1400°F Pure Silicone DTM Coating



Highland 1400-DTM is based on a 100% silicone resin with special ceramic colorants and additives. Special pigments are utilized to achieve maximum heat resistant properties and color stability. Highland 1400-DTM will fully cure and achieve optimum hardness when the substrate is placed in service. This coating can also be heat cured 350°F for one hour.

Tech Specs

Heat Resistance:	1400°F Constant
Vehicle Type:	100% Silicone
Reducer:	Highland Reducer
Mix Ratio:	Single Package
Pot Life:	N/A
Volume Solids:	48%
Theoretical Coverage:	769ft 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

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-SP5 White Metal Blast to achieve a low blast profile of .5-1 mils is recommended

Good: A SSPC-SP10 Near White Metal Blast to achieve a low blast profile of .5-1 mils is recommended

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

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-DTM 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

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

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

Recommended Uses

Highland 1400-DTM 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