854-TC Series

HiTemp 1000˚F Modified Silicone Topcoat

Highland 854-TC is an industrial Hi-heat coating specifically designed for high temperature substrates in demanding environments. This coating is based on a 100% silicone resin and special pigments to achieve maximum heat resistant properties and color stability.

Tech Specs

Heat Resistance:	1000°F Constant
Vehicle Type:	Modified Silicone
Reducer:	Highland 854 Reducer
Mix Ratio:	Single Package
Pot Life:	N/A
Volume Solids:	Silver: 25%
	All Others: 44%
Theoretical Coverage:	
Silver:	401 ft² /gal. @ 1 mil DFT
All Others:	705 ft² /gal. @ 1 mil DFT
VOC:	Less than 3.5 lbs./gal (420 g/l)
Flash Point:	45˚F (Lowest Flashing Component)
Dry Film Thickness:	
Silver:	2-3 mils DFT
All Others:	1.5-2.5 mils DFT
Wet Film Thickness:	
Silver:	8-12 mils WFT Maximum
All Others:	3.4-5.7 mils WFT Maximum
Dry-time:	Normal
To Touch:	½ - 1½ Hours
To Recoat:	4-6 Hours
To Ship:	24 Hours
Cure Requirements:	Complete cure achieved at 450˚F
Hot Application:	Available using 854-HA Formulation
Shelf Life:	2 Years Minimum
Finish:	Flat
Color:	Standard & Custom Colors
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 1.0-1.5 mils 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.

New Galvanized Surfaces:

Remove all oil, grease and flux by solvent cleaning per SSPC-SP1.

Weathered Galvanized:

Remove all dirt, oil and grease by solvent cleaning per SSPC-SP1. Remove rust or foreign deposits by wire brushing per SSPC-SP2 or power tool cleaning per SSPC-SP3.

Mixing & Application

Mixing: Mix thoroughly by boxing or stirring. Can be applied by brush, roller or spray. Spray application is desired, as a more uniform film is generally obtained. **Do not apply heavier film than specified, as the coating may blister when heat is applied.** To ensure optimal performance, apply according to recommendations below.

Standard Airless Applications

Airless:	Titan 740 Impact or equivalent
Pump Pressure:	2700 – 3100 PSI
Manifold Filter:	60 Mesh
Gun Filter:	60 Mesh
Hose:	1/4 inch ID
Gun:	LX-8011 or equivalent
Tip Range:	.015 - .021

Recommended Uses

Highland 854-TC is designed for use wherever maximum resistance to heat, humidity, and weather is required. Can be used on heaters, stacks, boilers, breeches, mufflers, radiators, storage tanks, pipelines, steam lines, etc., where operating temperature will not exceed 1000°F (649°C). **Not recommended** for use on the **inside** of ovens, stacks, etc.

Performance

This 100% silicone based coating, is able to withstand severe thermal cycling to 1000°F and can be used over Highland 827 Primer, or applied directly to clean steel. It has the unique ability to be handled in the air-dry state. It has exceptional color stability to 1000°F (538°C), with Black and Silver going to 1200°F (649°C), excellent heat resistant properties, excellent weathering characteristics and good corrosion protection.

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