850-PR Series

HiTemp 850°F Silicone Alkyd Primer

Highland 850-PR Series HiTemp primer is based on a specially modified silicone alkyd resin. 850-PR Series air dries to a tough, hard, weather and heat resistant finish. It utilizes a unique combination of solvent evaporation and resin cross-linking, and does not require a heat cure. Additionally, 850-PR includes a complicated system of rust inhibitors to prevent rust undercreep and provide a long service life.



Tech Specs

Heat Resistance: 850°F Constant

Vehicle Type: Modified Silicone Alkyd

Reducer: Xylene

Mix Ratio: Single Package

Pot Life: N/A Volume Solids: 42%

Theoretical Coverage: 677ft² /gal. @ 1 mil DFT

VOC: 4.1lbs per gallon (486 g/L)

Flash Point: 78°F

Dry Film Thickness: 1 – 1.5 mils DFT Wet Film Thickness: 2.4 – 3.6 mils WFT

Dry-time: Normal

To touch: 1 Hour
To Topcoat: 45 Minutes

Hot Application: N/A

Shelf Life: 2 Years Minimum

Finish: Flat

Color: Gray or Red Oxide

Packaging: 1, 5, & 55 gallon containers

Storage Temperature: 40°F - 100°F

Application Temp:

Ambient: 45°F Minimum Substrate: 40°F - 120°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.

Mixing & Application

Mixing: Highland 850-PR 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% - 7% with xylene.

To ensure optimal performance, apply according to recommendations below.

Airless Applications

Airless: Titan 740 Impact or equivalent Gun: LX-8011 or equivalent

Do not apply heavier film than specified, as the coating may blister when heat is applied.

Fluid Pressure: 2700 – 3100 PSI **Tip**: .015 - .021

Manifold Filter:60 MeshBrush or Roller:Touchup onlyGun Filter:360 MeshClean Up:Highland #901 Cleaning SolventHose:½ inch ID

Typical Systems

Highland 850-TC is the preferred topcoat for use with our 850-PR Series

Primer/Topcoat: Apply 1 coat of 850-PR Series at 1-1.5 mils DTF. After a dry time of 45 minutes or more has elapsed, apply one coat of 850-TC Series at 1.5-2 mils DFT.

A wide range of topcoats are suitable for use with Highland 850-PR Series Primer. For more options call a Highland representative.

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

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