

830 Series "Spray-Safe"

HiTemp Dry-Fall Modified Silicone Copolymer Primer



Highland 830 Series Primer is a single package silicone copolymer primer designed for heat affected zones up to 400°F. The "Dry-Fall" properties of 830 Series allow it to dry to a powder within 10-20 feet from point of application so that it may be safely used in areas where overspray damage to cars and equipment nearby would be a concern. Highland 830 Series offers superior longevity and protection compared to competitor's products. It offers maximum adhesion and corrosion protection even in limited surface preparation areas, and does not require a heat cure. This user friendly primer is supplied in light yellow to ensure proper coverage and easy hiding when topcoating. Engineered specifically for heavy industrial equipment, Highland 830 Series may be used on any service area ranging from Ambient to 400°F for premium corrosion protection.

Tech Specs

Heat Resistance:	400°F Constant
Vehicle Type:	Modified Silicone Copolymer
Reducer:	Required for Dry-Fall Effect
In summer:	Highland #30-E Reducer
In winter:	Highland #32-E Reducer
Mix Ratio:	Single Package
Pot Life:	N/A
Volume Solids:	43%
Theoretical Coverage:	689ft ² /gal. @ 1 mil DFT
VOC:	448 g/L
Flash Point:	-8°F (Lowest Flashing Component)
Dry Film Thickness:	2-3 mils DFT
Wet Film Thickness:	4.7-7 mils WFT

Dry-time:	Normal
To Touch:	10 Minutes
Tack Free:	30 Minutes - 1 Hour
To Topcoat:	1 Hours
To Handle:	2-3 Hours
Put in Service:	12 Hours
Shelf Life:	2 Years Minimum
Finish:	Flat
Color:	Light Yellow
Packaging:	5 gallon pails
Storage Temperature:	20°F - 110°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-SP6 Commercial Blast will provide good results in most situations.

Good: A SSPC-SP3 Power Tool Cleaning, SSPC-SP2 Hand Tool Cleaning, or waterjetting per SSPC-SP 12 to WJ-4 will provide good results.

Galvanized Steel: Contact a Highland representative as recommendation will vary depending on substrate and exposure conditions.

Mixing & Application

Mixing: Highland 830 Series needs to be thoroughly mixed using mechanical agitation. It is ready to spray after proper mixing and reduction.

Reduction: Reduction is required to achieve the dry-fall effect. Reduce by 15% - 20% with Highland 30-E in ambient temperatures above 80°F or 32-E reducer in ambient temperatures below 80°F.

Dry-Fall Application Instructions: To assure Dry-Fall effect, do not apply in temperatures below 45°F, on surfaces below 40°F, or humidity above 85% Rh. When humidity is above 50%, take caution to observe the dry-fall range as it may extend slightly past the 20 foot mark, up to 50 feet depending on other weather variables. Make sure the equipment being used will give accurate psi readings so the pressure from the pump can be maintained at 1800 psi allowing a maximum +/- 25 psi for surges. Do not apply in temperatures that are 5°F or less from the dew point.

Hot Application: Not recommended for this product line. Contact your Highland representative for alternate hot apply systems.

Note: 830 Series is not compatible with products containing zinc.

Highland 830 Series is designed for spray application. To ensure optimal performance, apply according to recommendations below.

Airless Gun:	Graco 205-591	Conventional Gun:	DeVilbiss MBC-510
Pump:	30:1/45:1/60:1	Fluid Tip:	E
Tip Range:	3.011 – 4.013	Air Cap:	704
Pump Pressure:	1,800 psi allowing +/- 25 psi	Atomizing Pressure:	60 psi
Hose:	3/8 inch ID	Pot Pressure:	20 psi
		Hose:	1/2 inch
Brush or Roller:	Touch Up Only	Clean Up:	Highland #901 Cleaning Solvent

If “Fingering” occurs during the spray application, increase the amount of thinner which will decrease the viscosity of the coating. Do not increase the pump pressure. Maintain 1800 psi allowing +/- 25 psi for surges.

Typical Systems

Highland 830 Series may topcoated with variety of Highland Topcoats:

Apply 1 coat of 830 Series at 2-3 mils DFT as a primer then topcoat with one of the following options.

840 Series Topcoat	HiTemp Dry-Fall topcoat high temperature areas up to 400°F
815-DF Series Topcoat	HiTemp Dry-Fall topcoat high temperature areas up to 400°F
200-QD Series Topcoat/DTM	Dry-Fall Topcoat for areas up to 200°F
150-BR Series Topcoat	For brush & roll applications in ambient “non-high temperature” areas

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, workmen 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