

827-HB Series HiTemp 1200°F

Dry-Fall Inert Multipolymeric Matrix DTM



827-HB Series HiTemp is a unique high-build single package inert multipolymeric matrix coating designed to provide heat stability & withstand severe cyclic conditions up to 1200°F. It is an excellent choice for coating under insulation (CUI), stacks, chemical plant components, refineries and other areas that require corrosion protection and see elevated temperatures up to 1200°F. It is specifically formulated to allow application to marginally prepared surfaces, and may even be applied over tightly adhered rust. 827-HB shows superior thermal shock resistance even when applied in excess of 16 mils TDFT, providing the best characteristics of a high temperature coating in a Dry-Fall "Spray Safe" formula that eliminates overspray worries and meets SS-4, SS-5, CS-6 and CS-8 of NACE SP0198-10.

Tech Specs

Heat Resistance:	1200°F Constant
Vehicle Type:	Inert Multipolymeric Matrix
Reducer:	30-E for Dry-Fall Applications >80°F 32-E for Dry-Fall Applications <80°F
Mix Ratio:	Single Package
Pot Life:	N/A
Volume Solids:	65%
Theoretical Coverage:	1042ft ² /gal. @ 1 mil DFT
VOC:	3.41 lbs per gallon (408 g/L)
Flash Point:	105°F (Lowest Flashing Component)
Dry Film Thickness:	4-8 mils DFT in standard DTM services 12-16 mils DFT for CUI Services
Wet Film Thickness:	6-12.5 mils WFT per coat

Dry-time:	Normal
To Recoat:	6 Hours
To Handle:	12 Hours
To Topcoat:	24 Hours (minimum)
Put in Service:	24 Hour Ambient Flash No Cure Schedule Required
Hot Application:	Yes, Consult Highland Technical Service for Hot Application Parameters
Shelf Life:	2 Years Minimum
Finish:	Flat
Color:	Black, Gray, Aluminum
Packaging:	1 gallon pails & 3 gallon pails
Storage Temperature:	20°F - 110°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 1.5-3.0 mils is recommended (especially for CUI services).

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-SP2 or SSPC-SP3 may be used and will provide good results.

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

Mixing & Application

Mixing: Highland 827-HB Series needs to be thoroughly mixed using mechanical agitation. It is ready to spray after proper mixing.

Reduction for Standard Spray Applications: Reduction is not required, if desired, reduce by 0% - 10% with Highland 30-E or 32-E reducer.

Reduction for Dry-Fall “Spray-Safe” Applications: Highland 827-HB Series must be reduced 10%-20% with Highland 30-E or 32-E reducer to achieve the dry-fall effect. Surface temperatures should not exceed 140°F when using 827-HB Series in a dry-fall application.

To ensure optimal performance, apply according to recommendations below.

Standard Airless Applications

Airless Gun: Graco 205-591
Pump: 30:1/45:1/60:1
Tip Range: 3.015 – 4.021
Pump Pressure: 3,000 psi
Hose: 3/8 inch ID

Conventional Gun: DeVilbiss MBC-510
Fluid Tip: E
Air Cap: 704
Atomizing Pressure: 60 psi
Pot Pressure: 20 psi
Hose: 1/2 inch

Dry-Fall Airless Applications

Airless Gun: Graco 205-591
Pump: 30:1/45:1/60:1
Tip Range: 3.015 – 5.015
Pump Pressure: 1,800-2,100 psi
Hose: 3/8 inch ID

Brush or Roller: Reduce 5-10% with Highland #105 Reducer

Clean Up: Highland #901 Cleaning Solvent

Typical Systems

CUI Services: Apply 2 coats of 827-HB Series at 6-8 mils DFT per coat to achieve 12-16 mils TDFT
DTM Services: Apply 1 coat of 827-HB Series at 4-8 mils DFT for mild services or 2 coats at 4-8 mils DFT per coat to achieve 8-16 mils TDFT for severe services
Primer/Topcoat: 827-HB Series may be used as a primer with Highland 815 Series (up to 500°F) or 899 Series (up to 1000°F)

Performance Data

Thermal Shock, Adhesion, Salt Spray, Cryogenic and CUI test data is available for various substrate preparations. Please ask your Highland representative for additional data pertaining to your specific project requirements

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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