827-HB Series HiTemp 1200°F Dry-Fall Inert Multipolymeric Matrix DTM



827-HB Series HiTemp is a unique high-build single package inert multipolymericmatrix 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 evenbe applied over tightly adhered rust. 827-HB shows superior thermal shock resistance even when applied inexcess 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	Dry-time:	Normal
Vehicle Type:	Inert Multipolymeric Matrix	To Recoat:	6 Hours
Reducer:	30-E for Dry-Fall Applications >80°F	To Handle:	12 Hours
	32-E for Dry-Fall Applications <80°F	To Topcoat:	24 Hours (minimum)
Mix Ratio:	Single Package	Put in Service:	24 Hour Ambient Flash
Pot Life:	N/A		No Cure Schedule Required
Volume Solids:	65%	Hot Application:	Yes, Consult Highland Technical
Theoretical Coverage:	1042ft ² /gal. @ 1 mil DFT		Service for Hot Application Parameters
VOC:	3.41 lbs per gallon 105°F (Lowest	Shelf Life:	2 Years Minimum
Flash Point:	Flashing Component)	Finish:	Flat
Dry Film Thickness:	4-8 mils DFT in standard DTM	Color:	Black, Gray, Aluminum
	services	Packaging:	1 gallon pails & 3 gallon pails
	12-16 mils DFT for CUI Services	Storage Temperature:	20°F - 110°F
Wet Film Thickness:	6-12.5 mils WFT per coat		

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		Dry-Fall Airless Applications	
Graco 205-591	Airless Gun:	Graco 205-591	
30:1/45:1/60:1	Pump:	30:1/45:1/60:1	
3.015 – 4.021	Tip Range:	3.015 – 5.015	
3,000 psi	Pump Pressure:	1,800-2,100 psi	
3/8 inch ID	Hose:	3/8 inch ID	
DeVilbiss MBC-510	Brush or Roller:	Reduce 5-10% with Highland	
E		#105 Reducer	
704			
60 psi	Clean Up:	Highland #901 Cleaning Solvent	
20 psi			
1/2 inch			
	tions Graco 205-591 30:1/45:1/60:1 3.015 – 4.021 3,000 psi 3/8 inch ID DeVilbiss MBC-510 E 704 60 psi 20 psi 1/2 inch	tionsDry-Fall Airless ApplicaGraco 205-591Airless Gun:30:1/45:1/60:1Pump:30:15 - 4.021Tip Range:3,000 psiPump Pressure:3/8 inch IDHose:DeVilbiss MBC-510Brush or Roller:270460 psiClean Up:20 psi1/2 inch	

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

Unconventional Solutions, Inc. Repair - Protect - Upgrade

28056 Oakland Oaks Ct., Wixom, MI 48393 | www.USIgroups.com | 248.735.7000