

# 827-HB Series

**1200°F HiTemp Dry-Fall**

**High Build Inert Multipolymeric Matrix DTM**

## **Your #1 Defense Against Corrosion Under Insulation**

- **High Performance High Temperature Protection in a “Spray-Safe” Dry-Fall Formula**
- **Withstands Extreme Thermal Shock Environments up to 1200°F**
- **High Build Inert Multipolymeric Matrix DTM**
- **Hot Apply up to 750°F**
- **Available in Black #9024, Gray #5200 and Aluminum #5026**



**Specialty Coatings for Peak Performance**  
**828-265-2513 • [www.highland-international.com](http://www.highland-international.com)**

# 827-HB Series Inert Multipolymeric Matrix DTM

827-HB Series HiTemp is a unique high-build single package inert multipolymeric matrix coating designed to provide heat stability and 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 at dry film thicknesses up to 16 mils. 827-HB Series provides the best characteristics of a premium 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.

## Performance Data

### CUI Cycle Testing

1 Cycle = 1 Week: 16 hours @ 500°F/260°C, cold water quench followed by 8 hours in boiling water 212°F/100°C. Repeat for 5 days, then 2 days @ 500°F/260°C followed by cold water quench.

#### Results (16 Cycles):

**No cracking or blistering in the field**

**No loss of adhesion, 5A per ASTM D 3359**

### Thermal Shock Resistance

A set of panels prepared per Highland specifications (12 mils DFT) were subjected to 1200°F/649°C for 24 hours and immediately submerged into room temperature water. The coated panels were inspected under a microscope and checked for dulling, micro-cracks, and adhesion. The panels were then exposed to 24 hours of salt spray testing (ASTM B117) and examined for rust or any corrosion attack.

**Method: ASTM D2485**

**Result: (30+ Cycles): Pass - no micro-cracks or blistering in the field, no corrosion present**

### Salt Spray:

Coatings were applied @ 12-16 mils DFT respectively per manufacturer recommendations. Panels were evaluated every 100 hours.

### Highland vs. Brand "X" Salt Spray Comparison

	Highland 827-HB	Competitor Brand "X"
@12 mils DFT	827-HB passed each evaluation with no blistering. At 600 hours a 0.1 mm creepage was noted. At 700 hours the final creepage was noted at 0.1 mm.	Brand "X" passed each evaluation with no blistering. At 300 hours a 0.1 mm creepage was noted. At 700 hours heavy rusting was noted across the entire field of the panel.
@16 mils DFT	827-HB passed each evaluation with no blistering. No creepage from the scribe or rusting in the field noted after 700 hours.	Brand "X" passed each evaluation with no blistering. No rusting in the field was noted. At 700 hours creepage from the scribe was noted at 0.1 mm.

**Additional Performance Data for Adhesion, Adhesion to Stainless, Hot Application Characteristics and Houston Pipe Test Results are available upon request.**

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