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
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

<table>
<thead>
<tr>
<th>Highland 827-HB</th>
<th>Competitor Brand “X”</th>
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<tbody>
<tr>
<td><strong>@12 mils DFT</strong></td>
<td></td>
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<tr>
<td>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.</td>
<td>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.</td>
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<tr>
<td><strong>@16 mils DFT</strong></td>
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<tr>
<td>827-HB passed each evaluation with no blistering. No creepage from the scribe or rusting in the field noted after 700 hours.</td>
<td>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.</td>
</tr>
</tbody>
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Additional Performance Data for Adhesion, Adhesion to Stainless, Hot Application Characteristics and Houston Pipe Test Results are available upon request.

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