HIGH TEMPERATURE UNDER INSULATION
ANTI-CORROSION COATING (NO.1567)

Specification Data

Type
2 pack Amine-cured silicon epoxy(one kind of epoxy based upon novolac resin technology) to provide a corrosion resistant barrier when used for steam purge pipe, thermal cycling environment and under cementitious fireproofing. It has excellent ability for anti-corrosion in heavy duty environment. No.1567 must be finished by No.1569 for topcoat when used for outdoor condition.

Uses
Used for carbon steel and stainless steel to corrosion prevention under 300℃ (572°F).

Characteristics
- Excellent heat and cold resistance, can withstand heat to 300°C (572°F), cold-resistant to -320°F (-196 ℃).
- Excellent anti-corrosion for thermal shocking structures.
- Excellent resistance to chemicals.
- It can be sprayed to the carbon steel, galvanized steel and stainless after its surface has been treated.
- It offers exceptional barrier and resistance to wet/dry cycling at elevated temperatures and thermal shock environment, suitable for CUI (Corrosion Under Insulation) and CUF (Corrosion Under Fireproofing) environment.

Color
Black, Silver-Gray

Finish
Semi-Gloss

Primer
Self Priming

Dry Temperature Resistance
Continuous: 300℃ (572°F)

VOC values
395 g/L; Use SP-12 thinner to thin up 5% (433 g/L).

Volume Solids
Above 60%

Theoretical Coverage
22.7 m²/Gal  6.0 m²/L  4.3 m²/Kg (DFT: 100 microns)

Dry Film Thickness
4~5 mils per coat (2~3 coats recommended).

Subsequent Coats
No.1569 Heat-Resisting Top Coating

Performance Data

<table>
<thead>
<tr>
<th>Test Method</th>
<th>System</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D2485, Method A Heat Resistance</td>
<td>3 ct. 1567</td>
<td>300°C/48hrs  No damage can be observed visually</td>
</tr>
<tr>
<td>ISO 20340 Corrosion Resistance</td>
<td>3 ct. 1567</td>
<td>No rust creepage @230°C (446°F)</td>
</tr>
<tr>
<td>ASTM D3359 Adhesion</td>
<td>3 ct. 1567</td>
<td>5A scale adhesion rating  (means no peeling or coating removal)</td>
</tr>
<tr>
<td>ASTM D4541-02 TYPE II Pull-Off Strength of Coatings</td>
<td>3 ct. 1567</td>
<td>41.1(Kgf/CM²)</td>
</tr>
<tr>
<td>ASTM F963 Soluble Heavy Metals Test</td>
<td>1 ct. 1567</td>
<td>n.d.</td>
</tr>
<tr>
<td>ASTM B117-11 Salt Spray</td>
<td>3 ct. 1567</td>
<td>No blistering, cracking and rusting after 10000 hrs (417 days)</td>
</tr>
</tbody>
</table>

YUNG CHI PAINT & VARNISH MFG. CO., LTD.
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http://www.rainbowpaint.com.tw  FAX:886-7-8715443
Taiwan FPC
Thermal Coating Test

<table>
<thead>
<tr>
<th>3 ct. 1567</th>
<th>95°C (203°F) Boiling water 1hr OK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5% H₂SO₄  72hrs OK</td>
</tr>
<tr>
<td></td>
<td>5% NaOH    72hrs OK</td>
</tr>
<tr>
<td></td>
<td>Petroleum  72hrs OK</td>
</tr>
</tbody>
</table>

Test reports and additional data available upon written request.

Certification
- Taiwan Formosa Plastics Thermal Coating Test (SGS Taiwan Ltd.)
- Taiwan Formosa Plastics CUI Specification test (PolyLab LLC)
- Taiwan Formosa Plastics Specification FGES-T-UPA12 (CSI-22 CSP-04 SSP-04 CHP-01 SHP-01)

Application Instruction
- **Surface preparation**
  - **General**: Remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. Surfaces must be clean and dry. Moisture, grease, sludge, dust, corrosive salt must be thoroughly cleaned from substrate.
  - **Steel**: Surface preparation standards can be used SSPC-SP10, Sa2 1/2 (ISO 8501-1:2007) or hand rusting to SIS St3. The galvanized or stainless steel must be sand blasted to SIS Sa1 before application. Roughness for structure of carbon steel requires for 45~60 microns, for stainless and galvanized steel surface is above 25 microns.

- **Mixing & Thinning**
  - **Mixing**: Mix base and hardener according to the mixing ratio and stir thoroughly.
  - **Thinning**: Use Epoxy Thinner (SP-12) to thin up 5-10%.
  - **Mixing Ratio**: Base : Hardener = 92 : 8 (by weight)
  - **Pot life**: 4 hours at 77 °F (mixture, 25°C)

- **Equipment**
  - **Spray Application**: Add thinner to base and stir thoroughly, then add hardener. Wet film should be below 200 microns for one coat spray to avoid sagging. Viscosity may higher while add hardener, please keep stirring for few minutes. The paint film must be cured for 7 days in room temperature before service, It show no cracking heating to 300°C from room temperature directly.
    - **Airless Spray**: Pump ratio : 45:1 or greater
      - Tip size : 0.025”~0.029”
      - Output PSI : 2500~4000 PSI
    - **Brush**: Application by brush is recommended for small areas only. Multiple coats may be required to achieve specified film thickness.
    - **Roller**: Application by roller is recommended for small areas only. Multiple coats may be required to achieve specified film thickness.
Environment conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Coating</th>
<th>Surface</th>
<th>Environment</th>
<th>Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>10°C (50°F)</td>
<td>10°C (50°F)</td>
<td>10°C (50°F)</td>
<td>30%</td>
</tr>
<tr>
<td>Maximum</td>
<td>45°C (113°F)</td>
<td>60°C (140°F)</td>
<td>45°C (113°F)</td>
<td>85%</td>
</tr>
</tbody>
</table>

Industry standards are for substrate temperatures to be 3°C(5°F) above the dew point. The product simply requires the substrate temperature to be above the dew point.

Curing Schedule

<table>
<thead>
<tr>
<th>Surface Temp. &amp; 50% Relative Humidity</th>
<th>Touch Free</th>
<th>Dry to Recoat &amp; Topcoat</th>
<th>Dry to Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°C (50°F)</td>
<td>12 hours</td>
<td>2 days</td>
<td>7 days</td>
</tr>
<tr>
<td>15°C (59°F)</td>
<td>6 hours</td>
<td>14 hours</td>
<td>5 days</td>
</tr>
<tr>
<td>25°C (77°F)</td>
<td>3 hours</td>
<td>8 hours</td>
<td>3 days</td>
</tr>
<tr>
<td>50°C (122°F)</td>
<td>1 hour</td>
<td>2 hours</td>
<td>1 days</td>
</tr>
</tbody>
</table>

1. No. 1567 needs 7 days to get final cure at 80°F environment temperature.
2. These data are based on a 12 mils (300 micron) dry film thickness. Higher film thickness, lower temperatures or insufficient ventilation will need longer cure times and could cause solvent entrapment in the coating film.

Cleanup & Safety

Cleanup: Use Epoxy Thinner (SP-12) to clean. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

Safety: Please read and follow all caution statements on this product data sheet and MSDS for this product.

Ventilation: Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards.

Package, Handling & Storage

Shelf Life: Minimum 1 years under normal conditions.

Shipping Weight: 1 Gallon Kit – Part A: 5.2 kg Part B: 0.4 kg
5 Gallon Kit – Part A: 25.7 kg Part B: 1.8 kg

Storage Temperature & Humidity: 5-35°C (41-95°F) 0-90% Relative Humidity

Flash Point: Part A: 25°C (77°F) Part B: 25°C (77°F)

Storage: Store in dry, shaded conditions away from sources of heat and ignition.