



# RAINBOW

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

### Specification Data

<b>Type</b>	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.
<b>Uses</b>	Used for carbon steel and stainless steel to corrosion prevention under 300°C (572°F).
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>• Excellent heat and cold resistance, can withstand heat to 300°C (572°F) ,cold-resistant to -320°F (-196°C).</li> <li>• Excellent anti-corrosion for thermal shocking structures.</li> <li>• Excellent resistance to chemicals.</li> <li>• It can be sprayed to the carbon steel, galvanized steel and stainless after its surface has been treated.</li> <li>• 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.</li> </ul>
<b>Color</b>	Black, Silver-Gray
<b>Finish</b>	Semi-Gloss
<b>Primer</b>	Self Priming
<b>Dry Temperature Resistance</b>	Continuous : 300°C (572°F)
<b>VOC values</b>	395 g/L ; Use SP-12 thinner to thin up 5% (433 g/L).
<b>Volume Solids</b>	52 ± 3 %
<b>Theoretical Coverage</b>	19.7 m <sup>2</sup> /Gal 5.2 m <sup>2</sup> /L 3.7 m <sup>2</sup> /Kg (DFT :100 microns)
<b>Dry Film Thickness</b>	4~5 mils per coat ( 2~3 coats recommended ).
<b>Subsequent Coats</b>	No.1569 Heat-Resisting Top Coating

### Performance Data

Test Method	System	Results
ASTM D2485, Method A Heat Resistance	3 ct. 1567	300°C/48hrs No damage can be observed visually
ISO 20340 Corrosion Resistance	3 ct. 1567	No rust creepage @230°C (446°F)
ASTM D3359 Adhesion	3 ct. 1567	5A scale adhesion rating ( means no peeling or coating removal )
ASTM D4541-02 TYPE II Pull-Off Strength of Coatings	3 ct. 1567	41.1(Kgf/CM <sup>2</sup> )
ASTM F963 Soluble Heavy Metals Test	1 ct. 1567	n.d.
ASTM B117-11 Salt Spray	3 ct. 1567	No blistering, cracking and rusting after 10000 hrs( 417 days )

EPDM151567XX V1.7

# YUNG CHI PAINT & VARNISH MFG. CO., LTD.

No.26,Yen Hai 3rd Road, Kaohsiung, Taiwan.  
<http://www.rainbowpaint.com.tw>

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Taiwan FPC Thermal Coating Test	3 ct. 1567	95°C (203°F) Boiling water 1hr OK 5% H <sub>2</sub> SO <sub>4</sub> 72hrs OK 5% NaOH 72hrs OK Petroleum 72hrs OK
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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** Pump ratio : 45:1 or greater

**Spray** 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.

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## • Environment conditions

Condition	Coating	Surface	Environment	Humidity
Minimum	10°C (50°F)	10°C (50°F)	10°C (50°F)	30%
Maximum	45°C (113°F)	60°C (140°F)	45°C (113°F)	85%

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

Surface Temp. & 50% Relative Humidity	Touch Free	Dry to Recoat & Topcoat	Dry to Handle
10°C (50°F)	12 hours	2 days	7 days
15°C (59°F)	6 hours	14 hours	5 days
25°C (77°F)	3 hours	8 hours	3 days
50°C (122°F)	1 hours	2 hours	1 days

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 Ventilation** Please read and follow all caution statements on this product data sheet and MSDS for this product. 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 18 months 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.

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