HEAT-RESISTING TOP COATING — NO.1569

Specification Data

Type
2 component, heat-resistant coating based on a moisture curing inorganic copolymer without heat curing. It prevents corrosion and protect the primer. NO. 1569 is a high performance coating that is applied using standard application equipment and can be cured at ambient temperatures. Suitable for temperatures up to 650°C (1200°F).

Uses
Finish coat in the heat-resistance and anti-corrosion system for better durability.

Characteristics
- The moisture curing crosslinking mechanism allows multiple coats to be applied without heat curing.
- Excellent heat resistance, can withstand substrate temperature up to 650°C.
- Can be sprayed on heat-resisting primer and inorganic zinc primer for protecting coating system and effectively protect paint film to extend the life of the system.
- Excellent resistance to corrosion upon the continuously recycle heating system.
- Good moisture resistance in an alternating cold and hot environment.

Color
Silver-Gray, Sliver (withstand temperature up to 650°C)
Desired colors (withstand temperature up to 300°C)

Finish
Flat

Dry Temperature Resistance
Continuous : 650°C (1200°F)

VOC values
500 g/L Use 1564X thinner to thin up 5% (532 g/L).

Volume Solids
Above 45%

Theoretical Coverage
48.4 m²/Gal  12.8 m²/L  8.5 m²/Kg (DFT :1.4 mils)

Dry Film Thickness
1.4~4 mils per coat.(1~2 coats recommend)

Preceding Coats
IZ-01 / IZ-01HS Inorganic Zinc Rich Primer, No.1566 Inorganic High Temperature Corrosion Prevention Coating, No.1567 High Temperature Under Insulation Anti-corrosion Coating

Repair
Self Repairing

Performance Data

<table>
<thead>
<tr>
<th>Test Method</th>
<th>System</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 4628-6-07</td>
<td>Blasted Steel</td>
<td>Chalking rating : 0.5</td>
</tr>
<tr>
<td>ASTM D610-08</td>
<td>1 ct. IZ-01 (75 microns)</td>
<td>Rust grade : 10</td>
</tr>
<tr>
<td></td>
<td>1 ct. 1569 (50 microns)</td>
<td></td>
</tr>
<tr>
<td>CNS 11478 (1995)</td>
<td>Blasted Steel</td>
<td>No blistering, cracking and peeling in appearance (600°C/48hr)</td>
</tr>
<tr>
<td>Heat Resistance</td>
<td>1 ct. IZ-01 (75 microns)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 ct. 1569 (50 microns)</td>
<td></td>
</tr>
<tr>
<td>ASTM D2485, Method A</td>
<td>Blasted Steel</td>
<td>150°C, 230°C, 450°C/24hr</td>
</tr>
<tr>
<td>Heat Resistance</td>
<td>3 ct. 1566 (300 microns)</td>
<td>No damage can be observed visually</td>
</tr>
<tr>
<td></td>
<td>2 ct. 1569 (70 microns)</td>
<td></td>
</tr>
<tr>
<td>ISO 20340</td>
<td>Blasted Steel</td>
<td>No rust creepage @ 450°C</td>
</tr>
<tr>
<td>Corrosion Resistance</td>
<td>3 ct. 1566 (300 microns)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ct. 1569 (70 microns)</td>
<td></td>
</tr>
<tr>
<td>ASTM D3359 Adhesion</td>
<td>Blasted Steel</td>
<td>5A scale adhesion rating</td>
</tr>
<tr>
<td></td>
<td>3 ct. 1566 (300 microns)</td>
<td>(means no peeling or coating removal)</td>
</tr>
<tr>
<td></td>
<td>2 ct. 1569 (70 microns)</td>
<td></td>
</tr>
<tr>
<td>ASTM F963 Soluble Heavy Metals Test</td>
<td>1 ct. 1569</td>
<td>n.d.</td>
</tr>
</tbody>
</table>

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Test Method System Results

<table>
<thead>
<tr>
<th>Test Method</th>
<th>System</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM G154-06 Cycle1</td>
<td>1 ct. 1569 (50 microns)</td>
<td>1000 hrs OK</td>
</tr>
<tr>
<td>ASTM D4214-07 Accelerated weather resistance</td>
<td></td>
<td>Exceed 8</td>
</tr>
</tbody>
</table>

Test reports and additional data available upon written request.

**Certification**
- Norsok M-501-04 : Report number KV-13-04545XA-1 (SGS Taiwan Ltd.)
- Taiwan Formosa Plastics CUI Specification test(PolyLab LLC)
- Taiwan Formosa Plastics Specification FGES-T-UPA12 (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.
  - **Primed Surfaces**
    NO.1569 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination and NO.1569 must be applied within the overcoating intervals specified (consult the relevant product data sheet).
  - **Areas of Breakdown and Damage**
    It should be prepared to the specified standard (Sa2 1/2 (ISO 8501-1:2007) or SSPC-SP6, Abrasive Blasting or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of NO.1569.

- **Mixing & Thinning**
  - **Mixing**
    Thoroughly mix to a uniform consistency prior to use.
  - **Thinning**
    Use No.1564X Thinner to thin up 10-20%
  - **Mixing Ratio**
    5.1 : 0.04
  - **Pot life**
    8 hours at 25°C(77°F) ; 5 hours at 40°C(104°F)

- **Equipment**
  - **Spray Application**
    Stir well before use, layered phenomenon may occur if the paint is kept for a certain period of time. Avoid applying the paint in rainy day or the relative humidity exceed 85%, particularly a wet surface must be thoroughly dried.
  - **Airless Spray**
    Pump ratio : 30:1 or greater
    Tip size : 0.018”~0.023”
    Output PSI : 2000~3500 PSI
  - **Brush**
    Application by brush is applicable. For special condition please consult with product manufacturer.
  - **Roller**
    Application by brush is applicable. For special condition please consult with product manufacturer.

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• 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>Final cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°C (50°F)</td>
<td>2 hours</td>
<td>1 days</td>
<td>14 days</td>
</tr>
<tr>
<td>15°C (59°F)</td>
<td>50 minutes</td>
<td>8 hours</td>
<td>10 days</td>
</tr>
<tr>
<td>25°C (77°F)</td>
<td>30 minutes</td>
<td>4 hours</td>
<td>7 days</td>
</tr>
<tr>
<td>50°C (122°F)</td>
<td>10 minutes</td>
<td>1 hours</td>
<td>3 days</td>
</tr>
</tbody>
</table>

1. No. 1569 needs 7 days to get final cure at 77°F environment temperature.
2. These data are based on a 4mil (100 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 Thermal Thinner (1564X) 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. 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**
1 Gallon Kit - Part A: 5.1 kg Part B: 0.04 kg
5 Gallon Kit - Part A: 25.5 kg Part B: 0.2 kg

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

**Flash Point**
25°C (77°F)

**Storage**
Store in cool ventilated place, do not exposed to the sun in outdoor to avoid affecting the quality.