



# RAINBOW

## HEAT-RESISTING TOP COATING – NO.1569

### Specification Data

<b>Type</b>	A single 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).
<b>Uses</b>	Finish coat in the heat-resistance and anti-corrosion system for better durability.
<b>Characteristics</b>	<ul style="list-style-type: none"><li>• The moisture curing crosslinking mechanism allows multiple coats to be applied without heat curing.</li><li>• Excellent heat resistance, can withstand substrate temperature up to 650°C.</li><li>• Can be sprayed on product number 1566, 1567 or 1568 for the protecting heat-resisting painting system and effectively protect paint film to extend the life of the system.</li><li>• Excellent resistance to corrosion upon the continuously recycle heating system.</li><li>• Good moisture resistance in an alternating cold and hot environment.</li></ul>
<b>Color</b>	Silver-Gray, Sliver (withstand temperature up to 650°C) Desired colors (withstand temperature up to 300°C)
<b>Finish</b>	Flat
<b>Dry Temperature Resistance</b>	Continuous : 650°C ( 1200°F )
<b>VOC values</b>	500 g/L Use 1564X thinner to thin up 5% (532 g/L).
<b>Volume Solids</b>	Above 45%
<b>Theoretical Coverage</b>	48.4 m <sup>2</sup> /Gal 12.8 m <sup>2</sup> /L 8.5 m <sup>2</sup> /Kg (DFT :1.4 mils)
<b>Dry Film Thickness</b>	1.4~4 mils per coat.(1~2 coats recommend)
<b>Preceding Coats</b>	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

### Performance Data

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

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

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Test Method	System	Results
ASTM G154-06 Cycle1 ASTM D4214-07 Accelerated weather resistance	1 ct. 1569 (50 microns)	1000 hrs OK Exceed 8

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** N/A  
**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

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	Final cure
10°C(50°F)	2 hours	1 days	14 days
15°C(59°F)	50 minutes	8 hours	10 days
25°C(77°F)	30 minutes	4 hours	7 days
50°C(122°F)	10 minutes	1 hours	3 days

1.No.1569 needs 7 days to get final cure at 80°F environment temperature.

2.These data are based on a 12 mil (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 Thermal Thinner (1564X) 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 12 months under normal conditions.

**Shipping Weight** 1 Gallon Kit – 6.1kg  
5 Gallon Kit – 32 kg

**Storage Temperature & Humidity** 5-35°C (41-95°F)  
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.

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