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## TEST REPORT

REPORT NO : 2022CE2518

PAGE : 1 OF 5

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### THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant : SHANGHAI ROVAL ZINC RICH PAINT CORPORATION  
No. 393, Fenggong RD. Malu,  
Jiading, Shanghai, 201801, China.

Manufacturer : SHANGHAI ROVAL ZINC RICH PAINT CORPORATION  
No. 393, Fenggong RD. Malu,  
Jiading, Shanghai, 201801, China.

Product : EPO ROVAL Cold Galvanizing Compound (ER 96%)

Reference Standard / Method of Test : ISO 12944-6:1998  
Title: Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 6: Laboratory performance test method.

Description of sample : Received six (6) pieces of test panels of EPO ROVAL Cold Galvanizing Compound (ER 96%) for testing. The details were described in the next pages.

Date Received of Complete Application : 12 September 2022

Job No. : J20223671963

Description of Test Results : The test results for the submitted test samples of EPO ROVAL Cold Galvanizing Compound (ER 96%) are described in next pages.

Issued Date : 18 October 2022

Approved Signatory;

(ABDUL AZIZ BIN HARON)  
Senior Testing Executive



(HAHNAS BINTI MAHBUT)  
Head

Chemical, Polymer and Composite Section  
Testing Services Department

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## Test Result

**Product** : EPO ROVAL Cold Galvanizing Compound (ER 96%)  
**Brand** : ROVAL  
**Type** : Liquid  
**Model** : 25kg, 2.5kg & 1.0kg

**Test Method** : ISO 12944-6:2018 Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 6: Laboratory performance test method.

### Test Condition of Neutral Salt Spray (ISO 9227):

Test Duration : 1440 Hours  
 Corrosivity category as defined in ISO 12944-2 : C5  
 Durability ranges according to ISO 12944-1 : High  
 Temperature exposure zone : 35°C  
 Salt solution used : 5% of NaCl  
 pH of collected solution : 6.5 – 7.2  
 Volume of salt collected in ml/h/80 cm<sup>2</sup> : 1 – 2 ml/hr

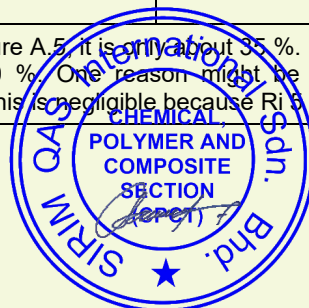
| No. | Evaluation parameters  | Requirements<br>ISO 12944-6<br>Clause 6.3 Table 4   | Results                                       | Remarks |
|-----|--|---|---|---------|
| 1   | Blistering<br>(ISO 4628-2)   | Blistering 0 (S0)                                   | 0 (S0)  | Pass    |
| 2   | Rusting<br>ISO 4628-3)   | Rusting Ri 0  | Ri 0  | Pass    |
| 3   | Cracking<br>(ISO 4628-4)   | Cracking 0 (S0)                                     | 0 (S0)  | Pass    |
| 4   | Flaking<br>(ISO 4628-5)  | Flaking 0 (S0)                                      | 0 (S0)  | Pass    |
| 5   | Corrosion at scribe after salt spray test<br><br>Scribed width : 1 mm<br>Scribed direction : X-cut | Maximum 1.5 mm corrosion at scribe as average value | < 1.5 mm corrosion at scribe as average value | Pass    |

Note: \*The degree of rusting and rusted area is depicted below based on ISO 4628-3 Table 1.

**Table 1 – Degree of rusting and rusted area**

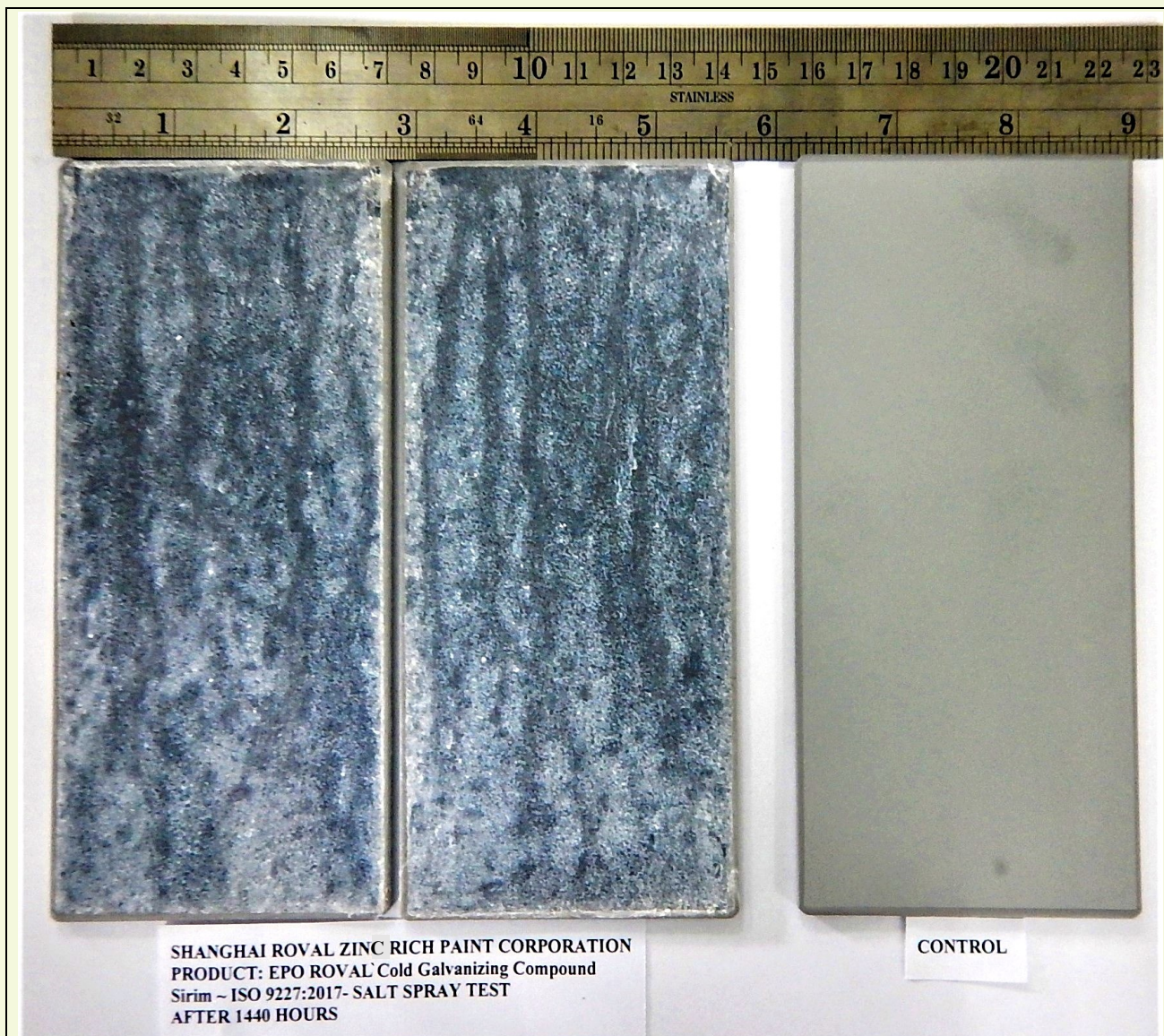
| Degree of rusting | Rusted area, %        |
|-------------------|-----------------------|
| Ri 0              | 0                     |
| Ri 1              | 0.05                  |
| Ri 2              | 0.5                   |
| Ri 3              | 1                     |
| Ri 4              | 8                     |
| Ri 5              | 40 to 50 <sup>a</sup> |

<sup>a</sup> When measuring the rusted area in Figure A.5, it is only about 35 %. If rust is assessed visually using Figure 5, the impression of rusted area is 40 % to 50 %. One reason might be that partly delaminated rust flakes are not distinguished from other rusted areas. But this is negligible because Ri 5 normally is outside any specification.



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**TESTED SAMPLE PHOTO**



Unscribed test sample of EPO ROVAL Cold Galvanizing Compound (ER96%) after neutral salt spray test at 1440 hours



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**TESTED SAMPLE PHOTO**



Scribed test sample of EPO ROVAL Cold Galvanizing Compound (ER96%) after neutral salt spray test at 1440 hours



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  - b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
  - c) Refusing to accept any further Product for Testing Services from the Applicant or whosoever related to the Applicant, whether subsidiary or otherwise;
  - d) Instructing the Applicant to withdraw and recall the advertisement, statement or document in question and advertise a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries twice in a national publication of SIRIM QAS International's choice at the Applicant's sole cost; and
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  - b) Changes in details of the Manufacturer's name and/or address;
  - c) Changes in details of the Factory location name and/or address;
  - d) Changes in details of the model and/or type designation
11. However, issuance of Supplementary Report due to the following reasons are FOC :
  - a) Misprints and typo errors;
  - b) Missing technical information as agreed in PP1 form;
  - c) Test data not reported;
  - d) Mistake in reporting of test data
12. Corrections to report shall only be allowed if the date of issuance of the original report has not exceeded 6 months and shall be limited to a maximum 3 times, after either case whichever occurs earlier, an Amendment or a Supplementary Report shall not be issued.