

SIRIM QAS International Sdn. Bhd. (Company No.: 199601037981 (410334-X)) No.1, Persiaran Dato' Menteri, P.O.BOX 7035, Section 2, 40700 Shah Alam, Selangor Darul Ehsan, Malaysia Tel: 03-55446667 Fax: 03-55446688 www.sirim-qas.com.my

TEST REPORT

REPORT NO : 2022CE2928

PAGE : 1 OF 5

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

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	: ROVAL SILVER Zinc Rich Compound (RS 83%)
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 panel of ROVAL SILVER Zinc Rich Compound (RS 83%) for testing. The details were described in the next pages
Date Received of Complete Application	: 19 October 2022
Job No.	: J20223672238
Description of Test Results	: The test results for the submitted test samples of ROVAL SILVER Zinc Rich Compound (RS 83%) are described in next pages
Issued Date	: 08 December 2022
Approved Signatory;	
G	international two
N N	ZIZ BIN HARON

(CPCT)

DIN

Head bennical, Polymer and Composite Section **Testing Services Department**

REPORT NO : 2022CE2928

PAGE : 2 OF 5

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

Test Result

Product	: ROVAL SILVER Zinc Rich Compound (RS 83%)
Brand	: ROVAL
Туре	: Liquid & Spray
Model	: 20kg, 7kg, 1.5kg, 0.7kg & Spray 420ml
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	:	720 Hours
Corrosivity category	:	C5
Durability ranges	:	Medium
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 ²	:	1 – 2 ml/hr

		Requirements		
No.	Evaluation parameters	ISO 12944-6 Clause 6.3 Table 4	Results	Remarks
1	Blistering (ISO 4628-2)	Blistering 0 (S0)	0 (S0)	Pass
2	Rusting* ISO 4628-3)	Rusting Ri 0	Ri 0	Pass
3	Cracking (ISO 4628-4)	Cracking 0 (S0)	0 (S0)	Pass
4	Flaking (ISO 4628-5)	Flaking 0 (S0)	0 (S0)	Pass
5	Corrosion at scribe after salt spray testScribed width: 1 mmScribed direction: X-cut	Maximum 1.5 mm corrosion at scribe as average value	0.0 mm	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	ernatio. 40 to 50ª			
^a When measuring the rusted area in Figure A in So	bely about 25 % If rust is assessed visually using Figure 5, the			

^a When measuring the rusted area in Figure A 3, 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 party delaminated rust flakes are not distinguished from other rusted areas. But this is negligible because B1 5 normally is outside any specification.



This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

TESTED SAMPLE PHOTOS

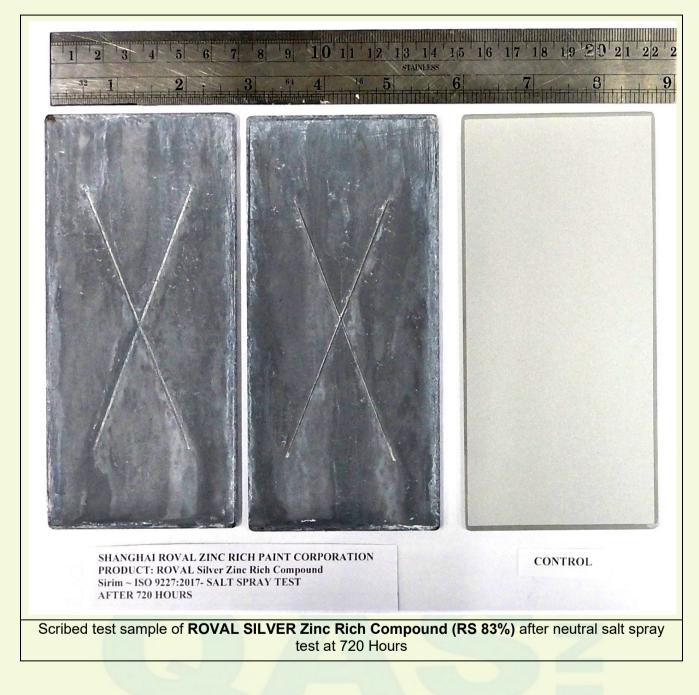




REPORT NO : 2022CE2928	PAGE : 4 OF 5

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

TESTED SAMPLE PHOTOS





REPORT NO : 2022CE2928

PAGE : 5 OF 5

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

CONDITIONS RELATING TO THE USE OF SIRIM QAS INTERNATIONAL TEST REPORT

- 1. A Test Report will be issued in respect of Testing Services conducted and shall relate only to the sample actually tested. SIRIM QAS International makes no warranty whatsoever and the Applicant shall not represent in any manner that any duplication or mass production of the Product is same as the sample actually tested or that SIRIM QAS International has tested any of the duplicated or mass-produced Product. Measurement uncertainty shall be included in the Test Report when there is no statement of conformity required. When a statement of conformity to a specification or standard is applied, the Simple Acceptance Rule is used. Unless otherwise stated, the Acceptance Rule with Guard Band is used.
- 2. The Test Report shall not be misused, amended, changed, varied or modified in any manner whatsoever by the Applicant or otherwise.
- 3. If the Test Report is to be furnished to any third party or to the public, each such Test Report shall be furnished in full, legible and in its entirety.
- 4. The Test Report shall not be reproduced and shall not in any event be used for any advertising purposes or whatsoever without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International of No 1, Persiaran Dato' Menteri, Building 8, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan.
- Customer (Applicant/Manufacture/Factory,etc.) is not permitted to use any SIRIM QAS International, SIRIM or other SIRIM's subsidiaries logo or words on packaging, sample's manual, technical specification, items and products.
- 6. Subject to consent and written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International, the customer (Applicant/Manufacture/Factory,etc.) may use SIRIM QAS International logo or word on the promotional materials and the Applicant shall only include the phrase, "A sample of this product has been tested by SIRIM QAS International ...(Test Report No) ...(dated) ...(for what test) ...(to which standard)" or such similar words which stress that only the sample was actually tested. This phrase shall only be used for the purpose of product advertisement or product promotion (eg; brochures/flyers/official website). For avoidance of doubt, the statement shall not be used on the sample, packaging of the sample, items and products.
- 7. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International may disclose the information pertaining to the Test Report for purposes of such investigation.
- In the event the Applicant is found in breach of this provision, SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries without prejudice to any other rights and remedies may take whatever action necessary including but not limited to:
 - a) Informing and placing a notice in the media;
 - b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
 - 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
 - e) Informing or lodging a report pertaining the Applicant's Test Report with the relevant authorities.
- 9. SIRIM QAS International is committed in supporting an environmentally-friendly business practices by reducing paper consumption, therefore we do not issue any hard copy of Test Report to the Applicant. However, additional certified true copy(ies) or softcopy of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee. The certified true copy(ies) or softcopy of test report shall only be given for test report issued not more than three (3) years from the date of issuance.

10. Issuance of Amendment Report due to the following reasons are chargeable to the Applicant :

- a) Changes in details of the Applicant name and/or address;
- 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.