



ALSEAL MARKETING SDN. BHD. Co.No.: 200301022720 (625140-D)

No. 86, Jalan Industri 3/3, Rawang Integrated Industrial Park, 48000 Rawang, Selangor.

Tel: +603-6094 2088 Fax: +603-6099 2930 Email: info@alsealmarketing.com

Website: www.alsealmarketing.com

Our reference: 20/J20/LTR/Y428

20th October 2020

Dear Valued Customer / Business Partners,

RE: "ALSEAL" AS-4002 Premier Construction Sealant – Staining Test Performance

This is to confirm that the staining test performance for "**ALSEAL**" **AS-4002 Premier Construction Sealant** has been tested by an independent third-party testing lab. The following standard was used to test the staining test performance of AS-4002:

Test Standard	Description	Report no.
ASTM C1248	Standard Test Method for Staining of Porous Substrate by Joint Sealants	7191241376- MEC20/02-ED (221419683)

Conclusion

Based on testing report: 7191241376-MEC20/02-ED (221419683), AS-4002 is considered to meet the requirement of ASTM C1248.

Should you require further information concerning the above product, please do not hesitate to contact us.

Thank you.

Yours sincerely,

For Alseal Marketing Sdn. Bhd.

Prepared by: Yap Wai Hoong
(R&D Chemist)

Verified by: Alex Ng
(General Manager (Technical))

Test Report No. 7191241376-MEC20/02-ED (221419683)
dated 14 Oct 2020



PSB Singapore

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Note: This report is issued subject to the Testing and Certification Regulations of the TÜV SÜD Group and the General Terms and Conditions of Business of TÜV SÜD PSB Pte Ltd. In addition, this report is governed by the terms set out within this report.

SUBJECT:

Testing of sealant submitted by Vital Technical Sdn Bhd

TESTED FOR:

Alseal Marketing Sdn Bhd
No. 86, Jalan Industri 3/3
Rawang Integrated Industrial Park
48000 Rawang
Selangor Darul Ehsan
Malaysia

Attn: Mr Cheong Chee Leong

SAMPLE DESCRIPTION:

The following items were received on 23 Jul 2020 as shown:

Sample/Substrate	Size	Quantity
'AS-4002 Premier Construction Sealant'	200 ml/cartridge	4 cartridges
marble	75 mm x 25 mm x 20 mm	24 pcs
granite	75 mm x 25 mm x 25 mm	24 pcs

TEST METHOD:

Adopted ASTM C1248 : 2018 Standard Test Method For Staining Of Porous Substrate By Joint Sealants

Test: Standard Conditions, 23°C and 50% relative humidity

Curing conditions : 23°C and 50% relative humidity for 21 days
Compression at class 50
Test conditions : Standard Conditions, 23°C and 50% relative humidity,
14 and 28 days
No. of determinations : 4 pcs for standard conditions, 23°C and 50% relative humidity,
2 for 14 days and 2 for 28 days



Laboratory:
TÜV SÜD PSB Pte. Ltd.
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: enquiries@tuvsud.com
<https://www.tuvsud.com/en-sg>
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
1 Science Park Drive, #02-01
Singapore 118221
TUV®

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Test: Heat Ageing in Oven

Test equipment : Thermal Oven
 Curing conditions : 23°C and 50% relative humidity for 21 days
 Compression at class 50
 Test conditions : Heat ageing: 70°C in oven, 14 and 28 days
 No. of determinations : 4 pcs, 2 for 14 days and 2 for 28 days

Test: UV Exposure

Test equipment : QUV Weatherometer
 Lamp designation : Fluorescent UVA 340 mm
 Curing conditions : 23°C and 50% relative humidity for 21 days
 Compression at class 50
 Test conditions : UV exposure: 4 Hours UV at 60°C and 4 hours condensation
 at 50°C, 14 and 28 days (ASTM G154)
 No. of determinations : 4 pcs for UV exposure, 2 for 14 days and 2 for 28 days

Standard Condition parameters: 23 ± 2°C and 50 ± 5% relative humidity.

CONDITIONING:

Unless otherwise specified, all test specimens were tested at 23 ± 2°C and 50 ± 5% relative humidity.
 Standard Conditions parameters: 23 ± 2°C and 50 ± 5% relative humidity.

TEST RESULTS:

Test, Standard Conditions, 23°C and 50% RH	'AS-4002 Premier Construction Sealant'	
	Marble	Granite
Staining On Porous Substrates Observation for Staining after		
a. Standard conditions, 23°C and 50% relative humidity, 14 days	No surface stain	No surface stain
b. Standard conditions, 23°C and 50% relative humidity, 28 days	No surface stain	No surface stain

Test, Heat Ageing in Oven	'AS-4002 Premier Construction Sealant'	
	Marble	Granite
Observation for Staining after		
a. Heat ageing: 70°C in oven, 14 days	No surface stain	No surface stain
b. Heat ageing: 70°C in oven, 28 days	No surface stain	No surface stain


Test, UV Exposure	'AS-4002 Premier Construction Sealant'	
	Marble	Granite
Observation for Staining after		
a. UV exposure, 14 days	No surface stain	No surface stain
b. UV exposure, 28 days	No surface stain	No surface stain

Ed *Indians*




REMARKS:

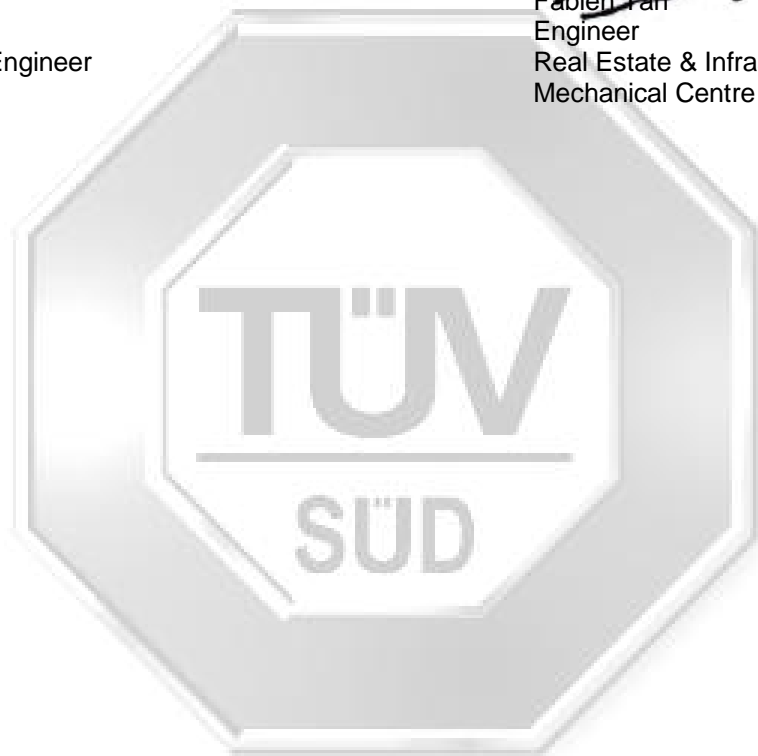
1. The test conditions were adopted from ASTM G154 : 2016 Standard Practice For Operating Fluorescent Light Apparatus For UV Exposure Of Non-Metallic Materials.
2. The test was requested by the client.
3. The joint movement class was specified by the client.
4. The substrates did not require priming before application of the sealant as specified by the client.



Eddie Suwand
Testing Officer
Senior Associate Engineer



Fabien Tan
Engineer
Real Estate & Infrastructure
Mechanical Centre



Test Report No. 7191241376-MEC20/02-ED (221419683)
dated 14 Oct 2020



PSB Singapore

Please note that this Report is issued under the following terms :

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Effective 01 September 2020

