



Bostik

SEAL'N FLEX ONE PLUS P590

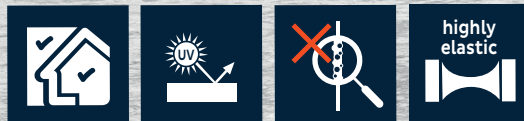
LOW MODULUS
ELASTIC POLYURETHANE SEALANT



BOSTIK P590 SEAL'N'FLEX ONE PLUS is a New Generation one component low modulus professional high quality and durable polyurethane sealant that cures under influence of humidity to form a durable elastic bubble free seal.

- Extremely elastic, > 1.000% elongation at break
- Zero-bubbling
- Excellent adhesion on porous substrates without primer
- Ultimate UV resistant
- Label-free

CONSTRUCTION & FACADE



www.bostik.com



Bostik

SEAL 'N' FLEX[®] ONE PLUS P590

LOW MODULUS POLYURETHANE SEALANT

6th August 2021

YOUR SMART ADVANTAGES

- Low modulus
- +100%/-50% joint movement
- Extremely elastic, > 1,000% elongation at break
- Bubble free curing
- Sag free, easy tooling
- Excellent durability
- UV resistant
- Paintable*
- Made in Australia

USES

Bostik Seal 'N' Flex[®] One Plus P590 is a low modulus, bubble free curing, universal polyurethane sealant for construction and expansion joints. When cured it will form a tough and flexible seal capable of cyclic expansion and compression movement of +100%/-50%.

Bostik Seal 'N' Flex One Plus P590 can be used on:

- Insitu concrete and render
- Precast and tilt up panels
- Aluminum Composite Materials
- EIFS/ETICS
- Metal Cladding
- Brickwork and block work
- Plasterboard face and paper lined recessed edges
- Fibre cement sheet
- Aluminium windows
- Granite, sandstone and marble
- GRC, fiberglass and mostly specialty panel systems

CERTIFICATIONS

- ASTM C920
- ASTM C1248
- F-EXT-INT-CC 25LM: EN 15651-1 for Façade Joints
- EMICODE EC1
- SNJF F25E

PRODUCT CHARACTERISTICS

Viscosity	Non-sag, smooth thixotropic paste
Cure method	Moisture curing
Application temperature	5 to 40°C

Product codes

300ml cartridge/ 20 per carton

Grey	30619339
White	30619347
Black	30619336

600ml sausages/ 20 per carton

Grey	30619340
White	30619348
Black	30619337
Limestone	30619341
Sandstone	30619346
Off-white	30619342
Epping Grey	30619338

TYPICAL PERFORMANCE DATA (approx.)

Temperature resistance	-30 to 80°C
Skin time	90 minutes
Cure rate @ 23°C/50%RH	3mm/24 hours on porous substrates
Full cure	7 days on porous substrates. Allow 14 days in joints over 20mm wide.
Specific gravity	1.30 g/ml
Shore A hardness	20
100% Modulus	0.30 N/mm ²
Tensile strength	1.20 N/mm ²
Elongation at break	> 1000%
Total joint movement	+ 100% / -50%
Maximum joint width	Up to 80mm

BOSTIK SEAL 'N' FLEX® ONE PLUS P590

DIRECTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting www.bostik.com.au.

SURFACE PREPARATION

1. Application temperature + 5°C to + 40°C (applies to environment and substrates)
2. Clean and dry all surfaces by removing foreign matter and contaminants such as laitance oil, dust, grease, frost, water, dirt, old sealants, curing agents and any protective coating
3. Dust and loose particles should be vacuum cleaned.

PRIMING

Bostik Seal 'N' Flex One Plus P590 adheres perfectly without the use of a primer to most porous & non-porous substrates. Always test adhesion prior to application.

IMPORTANT: For optimum adhesion and in areas of critical, high performance applications such as high stress joints, extreme weather exposure or surfaces that are too porous, the use of substrate primer is required.

Porous substrates:

1. Absorbent or porous substrates will allow a bead of water to easily soak into and wet out the surface of the substrate
2. For maximum performance on porous surfaces and in all periodically immersed and submerged applications, use **Bostik N49 Primer** (refer to the Bostik N49 Primer Technical Data Sheet)
3. Porous substrates not subject to immersion or ponded water e.g. vertical expansion joints in concrete or masonry structures will not require priming if clean, dry and uncontaminated

Non-porous substrates:

1. Non-absorbent substrates will cause a bead of water to be retained on the surface of the substrate as a raised droplet. The droplet does not easily soak into the surface of the substrate.
2. **Bostik N40 Primer** is recommended for non-porous plastic and metal substrates e.g. u-PVC outlets and pipe work, brass, copper fittings, stainless steel trays and flashings (refer to the Bostik N40 Primer Technical Data Sheet).
3. Prime plastics and metallic non-porous substrates with **Bostik N40 Primer** using the two-cloth method described in the Bostik N40 Primer Technical Data Sheet

APPLICATION

Bostik Seal 'N' Flex One Plus P590 should be dispensed from either the cartridge or sausage by means of a caulking gun.

Cartridge application:

1. Pierce the membrane at the top of the top of the cartridge and screw on the nozzle
2. Cut the nozzle to give the required angle and bead size
3. Place the cartridge in a caulking gun and squeeze the trigger

Sausage application:

1. Clip the end of the sausage and place in a barrel gun
2. Screw the end cap and nozzle onto the barrel gun

3. Use the trigger to extrude the sealant. To stop; depress the catch plate.

Apply **Bostik Seal 'N' Flex One Plus P590** in a continuous operation using enough pressure to properly fill the joint. Tool off the surface of the sealant with an appropriate sized spatula or trowel. Apply sufficient pressure to leave a smooth, consistent surface and ensure maximum contact with the interface of the joint

JOINT SEALING

A joint with the correct dimensions is able to absorb movements between building materials. Always use a backing rod for correct sealant geometry and contact with the substrate.

- Prime after the installation of backing rod
- Ensure maximum adhesion to the bond face
- Minimum allowable joint depth is 5mm
- Maximum allowable joint width is 80mm
- Tool sealant to achieve concave shape



Joint Width to Depth ratio:

Width	Depth
Min 5mm to 10mm	1:1 ratio i.e. A 10mm width will require 10mm depth
>10mm, up to 80mm	Depth (mm) = $\frac{\text{Width (mm)}}{3} + 6$ i.e. A 16mm joint width will require a 12mm depth: Depth (mm) = $\frac{16}{3} + 6 = 12\text{mm}$

COVERAGE

The estimated lineal metre yield per pack size is recommended in the following table. No allowance has been made for waste or irregular joint geometry.

Joint (W x D)	5mm x 5mm	10mm x 10mm	20mm x 10mm	50mm x 25mm
300ml Cartridge	12	3	1.5	0.24
600ml Sausage	24	6	3	0.48

W=Joint width (mm). D=Joint depth (mm).

BOSTIK SEAL 'N' FLEX® ONE PLUS P590

CLEANING

Clean off uncured material, hands and equipment immediately after use using **Bostik Handy Wipe towels**. Cured material can be removed by mechanical means only.

PAINTABILITY

Bostik Seal 'N' Flex One Plus P590 can be painted after a minimum of 7 days. Coatings containing solvents such as enamels, oil based or other coatings may cause the surface of the sealant to react creating a tacky surface. Surface coatings may discolour in direct contact with cured **Bostik Seal 'N' Flex One Plus P590**. Surface coatings may crack and craze as a result of cyclical movement of supporting sealant joint. A field test is recommended to ensure compatibility of any coating with **Bostik Seal 'N' Flex One Plus P590**.

LIMITATIONS

Not recommended for:

- Use in chlorinated water such as swimming pools, spas, etc.
- PE, PP, PC, PMMA, PTFE, soft plastics, neoprene and bituminous substrates
- Constantly immersed salt water
- Use for glazing applications
- Application to cement based substrates within 28 days of initial pour or set
- Use in trafficable joints
- Applied in temperatures below 5°C or above 40°C
- Exposure to water and/or alcohol before it has completely cured
- Applied to joints less than 5mm in width and depth
- Applied on joints larger than 80mm
- Bostik Seal N Flex One Plus White may yellow on the surface if exposed to strong natural or artificial UV light for prolonged periods of time.

As all substrates and conditions are different, it is strongly recommended that the applicator, or end user conducts their own tests and ensure the product meets their own end use requirements

STORAGE AND SHELF LIFE

Store in cool (between 5°C to 25°C) dry, well-ventilated area out of direct sunlight. Shelf life is 15 months from production date in original unopened packaging and correct storage conditions.

VOC INFORMATION

2.8 g/L

BOSTIK HOTLINE

Smart help 1800 267 845



This datasheet is for the general help of users. It is provided in good faith. The data is current and accurate to the best of our knowledge. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. Users should carry out tests to decide the product's suitability for purpose. This data sheet and the properties of the product may change without notice. Users, suppliers and retailers should check that the data sheets they have are the latest. To the maximum extent permitted by law, Bostik disclaims all warranties in relation to manufacture and use of the product. Bostik is not liable for representations made by users, suppliers or retailers about the product. Bostik is not liable for any loss or damage resulting from incorrect, careless, or negligent use or storage of the product, including use of out of date product. Any liability arising from use of the product is limited to the replacement or purchase price of the product. Bostik does not exclude rights and remedies that cannot be excluded by legislation, for example under the Australian Consumer Law (ACL). Sale of the product by Bostik is subject to the Bostik Australia Proprietary Limited Conditions and Terms of Sale. For more information on Bostik, products, and conditions of use and sale visit www.bostik.com/au

Test Report No. 7191256600-MEC21/02A-ED (221420468)
dated 2 Jul 2021



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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 Bostik Findley (M) Sdn Bhd

TESTED FOR:

Bostik Findley (M) Sdn Bhd
 Lot 112 & 113, Kawasan Perindustrian Senawang
 70450 Seremban, Negeri Sembilan
 Malaysia

Attn: Mr Herman Chen

SAMPLE DESCRIPTION:

The following items were received on 22 Mar 2021 as shown:

Sample	Size	Quantity
'Bostik P590 Seal 'N' Flex One Plus' (refer to Photo 1)	600 ml/sausage foil	10 sausage foils



Photo 1: 'Bostik P590 Seal 'N' Flex One Plus'

TEST METHODS:

Adopted ASTM C920 : 2018 Standard Specification For Elastomeric Joint Sealants

Staining And Colour Change, UV Exposure

- Adopted ASTM C510 : 2016 Standard Test Method For Staining And Colour Change Of Single Or Multi-Component Joint Sealants

Test equipment	:	QUV Weatherometer
Lamp designation	:	Fluorescent UVA 340 mm
Test cycle	:	8 hours UV exposure at 60±3°C and 4 hours condensation at 50±3°C, irradiance 0.89 W/m ² .nm (ASTM G154)
Exposure duration	:	100 hours



	LA-2007-0380-A LA-2007-0381-F LA-2007-0382-B LA-2007-0383-G LA-2007-0384-G LA-2007-0385-E	LA-2007-0386-C LA-2010-0464-D LA-2018-0702-B LA-2018-0703-G LA-2020-0747-L	The results reported herein have been performed in accordance with the terms of accreditation under the Singapore Accreditation Council. Inspections/Calibrations/Tests marked "Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our inspection body/laboratory.
	Laboratory: TÜV SÜD PSB Pte. Ltd. 15 International Business Park TÜV SÜD @ IBP Singapore 609937		

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 Singapore 609937
TUV®



No. of determinations : 4 samples: 2 samples with sealant and 2 samples without sealant (For UV Exposure)
2 control samples: 1 sample with sealant and 1 sample without sealant (Standard Conditions)

Staining And Colour Change, Standard Conditions In Distilled Water

Test apparatus : Container with distilled water
Test condition : Distilled water immersion for 1 minute, once a day, (5 days per week)
Test duration : 14 days
No. of determinations : 2 samples: 1 sample with sealant and 1 sample without sealant (For distilled water immersion)
2 control samples: 1 sample with sealant and 1 sample without sealant (Standard Conditions)

Extrudability

2. Adopted ASTM C1183/C1183M : 2013 (2018) Standard Test Method For Extrusion Rate Of Elastomeric Sealants

Test pressure : 40 psi
No. of determination : 1

Flow Properties

3. ASTM C639 : 2015 Standard Test Method For Rheological (Flow) Properties Of Elastomeric Sealants

Method : Test method for 'Type II' sealant
Test conditions : a) 4.4°C in environmental chamber for 4 hours
b) 50°C in oven for 4 hours
No. of determinations : 2 for vertical and horizontal displacements

Hardness

4. ASTM C661 : 2015 Standard Test Method For Indentation Hardness Of Elastomeric-Type Sealants By Means Of A Durometer

Test Conditions:

a) 23°C and 50% relative humidity for 7 days
b) 38°C and 95% relative humidity for 7 days
c) 23°C and 50% relative humidity for 7 days
No. of determinations : 2, 3 points per test piece

Tack-Free Time

5. ASTM C679 : 2015 Standard Test Method For Tack-Free Time Of Elastomeric Sealants

No. of determinations : 2



Cyclic Adhesion & Cohesion

6. Adopted ASTM C719 : 2014 (2019) Standard Test Method For Adhesion And Cohesion Of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle)

Test Conditions:

- a) 23°C and 50% relative humidity for 7 days
- b) 38°C and 95% relative humidity for 7 days
- c) 23°C and 50% relative humidity for 7 days
- d) Immersion in distilled water at 23°C for 7 days
- e) Drying in oven at 70°C for 7 days

Substrate : Mortar and aluminium
Test temperature : Room temperature
Class : 50/100 or -50/+100 compression/extension
No. of cycles : 10
Crosshead speed : 3.2 mm/hr
No. of determinations : 3 per substrate

Effects Of Heat Ageing

7. ASTM C1246 : 2017 Standard Test Method For Effects Of Heat Ageing On Weight Loss, Cracking, And Chalking Of Elastomeric Sealants After Cure

Test Conditions:

- a) 23°C and 50% relative humidity for 28 days
 - b) 70°C for 21 days
- No. of determinations : 3, 1 as control


Effects Of Accelerated Weathering

8. Adopted ASTM C793 : 2005 (2017) Standard Test Method For Effects Of Accelerated Weathering On Elastomeric Joint Sealants

Test Conditions:

23°C and 50% relative humidity for 21 days

Test equipment : QUV Weatherometer
Test cycle : 8 hours UV exposure at 60±3°C and 4 hours condensation at 50±3°C, irradiance 0.89 W/m².nm (ASTM G154)
Lamp designation : Fluorescent UVA 340 mm
Exposure duration : 250 hours
No. of determinations : 3 (1 as control)
Bend test
Test equipment : Environmental chamber
Apparatus : Steel mandrel
Test condition : -26°C for 24 hours
No. of determinations : 3

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Adhesion-In-Peel

9. Adopted ASTM C794 : 2018 Standard Test Method For Adhesion-In-Peel Of Elastomeric Joint Sealants

Test Conditions:

23°C and 50% relative humidity for 21 days
 Substrate : Mortar and aluminium
 Crosshead speed : 50 mm/min
 No. of determinations : 4 per substrate

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	'Bostik P590 Seal 'N' Flex One Plus'	ASTM C920 : 2018 Standard Specification For Elastomeric Joint Sealants
1. Staining And Colour Change	No staining No colour change	The sealant shall not cause any visible stain on the top surface of a white cement mortar base
2. Extrudability	45.6 ml/min	Type S (single component), grade NS (non-sag or gunnable sealant) shall have an extrusion rate of not less than 10 ml/min
3. Rheological (Flow) Properties	Vertical displacement: 0 mm sag Horizontal displacement: No deformation	Grade NS (non-sag) or gunnable sealant shall have flow characteristics such that it does not sag more than 4.8 mm (³ / ₁₆ in.) in vertical displacement. Also the sealant shall show no deformation in horizontal displacement (refer to Types II and IV in the tests)
4. Indentation Hardness	test piece 1, average : 27.7 test piece 2, average : 28.6 average of 2 test pieces : 28.2	Use T1 (traffic) sealant shall have a hardness reading, after being properly cured, of not less than 25 Use T2 (traffic) sealant shall have a hardness reading, after being properly cured, of less than 25 Use NT (non-traffic) sealant shall have a hardness reading, after being properly cured, of less than 60
5. Tack-Free Time	No transfer of test specimens to the polyethylene film	There shall be no transfer of the sealant to the polyethylene film when tested at 72 hours

Ed *Yulans*




TEST RESULTS:

Test	'Bostik P590 Seal 'N' Flex One Plus'	ASTM C920 : 2018 Standard Specification For Elastomeric Joint Sealants
6. Adhesion & Cohesion Under Cyclic Movement, Class 50/100 a. Mortar b. Aluminium	No loss in bond No loss in bond	The total loss in bond and cohesion areas among the three specimens tested for each surface shall be no more than 9 cm ² (1 1/2 in. ²) with standard mortar, glass, and aluminium or any other specified substrates
7. Effects Of Heat Ageing On Weight Loss, Cracking And Chalking, average	0.9% No cracking and chalking	The sealant shall not lose more than >7% of its original weight or show any cracking and chalking
8. Effects Of Accelerated Weathering	No cracks after UV exposure and bend test	The sealant shall show no cracks greater than those shown in example #2 of Figure 1 in ASTM C793 after the specified UV exposure and shall show no cracks greater than those shown in example #2 of Figure 2 in ASTM C793 after exposure at cold temperature and the bend test (refer to Photo 2)
9. Adhesion-In-Peel, average a. Mortar b. Aluminium	63.1 N (14.2 lbf) 77.9 N (17.5 lbf) cohesive failure within the sealant and no adhesive bond loss between sealant and substrate for each test piece	The peel strength for each individual test shall not be less than 22.2 N (5 lbf) when tested with standard mortar, glass, and aluminium or any other specified substrate. In addition, the sealant shall show no more than 25% adhesive bond loss for each individual test

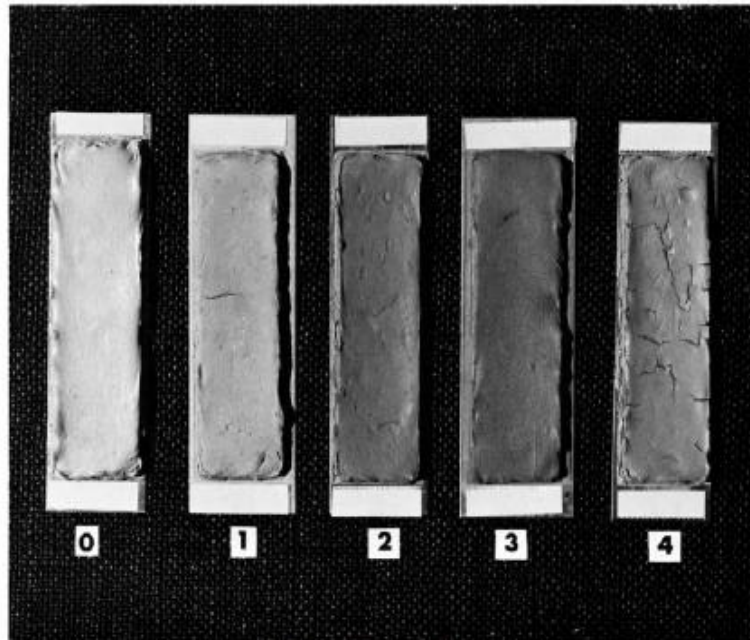
REMARKS:

- The test conditions for staining and colour change tests and effects of accelerated weathering test were adopted from ASTM G154 : 2016 Standard Practice For Operating Fluorescent Light Apparatus For UV Exposure Of Non-Metallic Materials.
- For effects of accelerated weathering test, in ASTM C793, Photo 2 consists of Figure 1 which indicate the presence of cracks after UV exposure and Figure 2 which indicate the presence of cracks after bend test.
- The substrates did not require priming before application of the sealant as specified by the client.
- The class and types of substrate are specified by the client for ASTM C719 joint movement and ASTM C794 peel strength tests.
- One sausage foil was sent to other section for material identification/verification FTIR test.
- The remainder test samples were collected by the client as requested.


Eddie Suwand
Testing Officer
Senior Associate Engineer

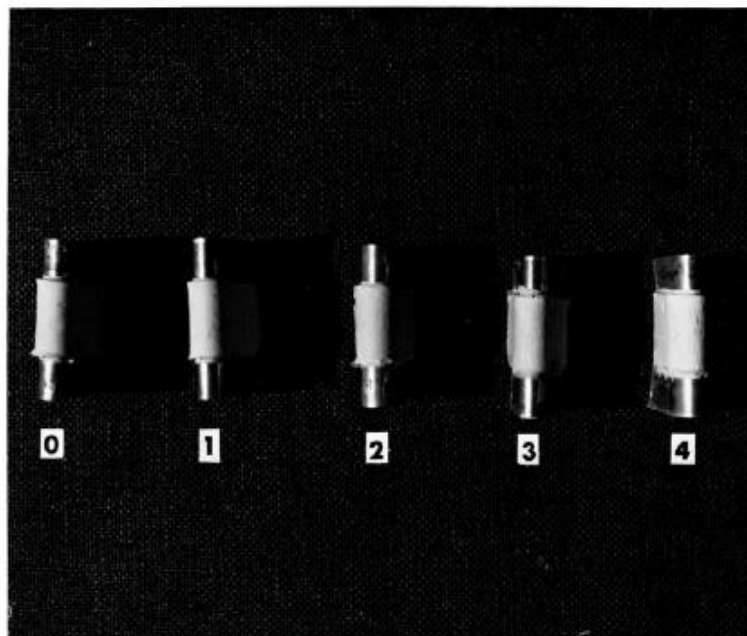

Fabien Tan
Engineer
Real Estate & Infrastructure
Mechanical Centre

ASTM C793 - 05 (2017)



Note: 1—Number 0 represents no cracks.

FIG. 1 Examples of Cracking Obtainable After the Weathering Test



Note: 1—Number 0 represents no cracks.

FIG. 2 Examples of Cracking Obtainable After the Bend Test

Photo 2: Figures 1 and 2 showing presence of cracks after UV exposure and after bend test respectively (taken from ASTM C793 as a guide and are not client's samples)

Ed *Yulans*

Test Report No. 7191256600-MEC21/02A-ED (221420468)
dated 2 Jul 2021

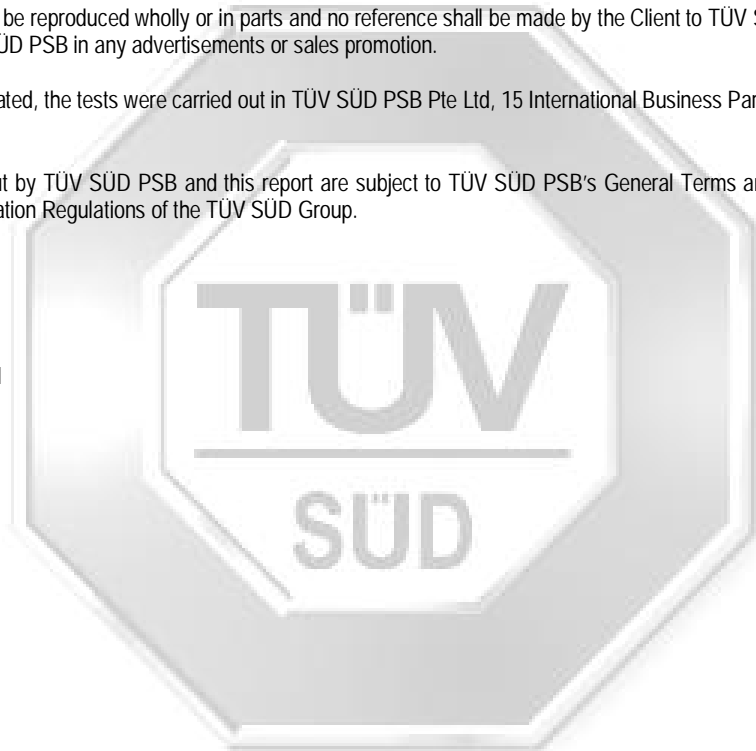


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Effective 26 January 2021



Test Report No. 7191256600-MEC21/02C-ED (221420468)
dated 18 Jun 2021



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SUBJECT:

Testing of sealant submitted by Bostik Findley (M) Sdn Bhd

TESTED FOR:

Bostik Findley (M) Sdn Bhd
Lot 112 & 113, Kawasan Perindustrian Senawang
70450 Seremban, Negeri Sembilan
Malaysia

Attn: Mr Herman Chen

SAMPLE DESCRIPTION:

The following items were received on 22 Mar 2021 as shown:

Sample	Size	Quantity
'Bostik P590 Seal 'N' Flex One Plus' (refer to Photo 1)	600 ml/sausage foil	2 sausage foils



Photo 1: 'Bostik P590 Seal 'N' Flex One Plus'

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 50/100 or -50/+100 compression/extension
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:
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Singapore 609937
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Test Report No. 7191256600-MEC21/02C-ED (221420468)
 dated 18 Jun 2021



PSB Singapore

Test: Heat Ageing in Oven

Test equipment : Thermal Oven
 Curing conditions : 23°C and 50% relative humidity for 21 days
 Compression at class 50/100 or -50/+100 compression/extension
 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 50/100 or -50/+100 compression/extension
 Test conditions : UV exposure: 8 hours UV exposure at 60±3°C and 4 hours
 condensation at 50±3°C, irradiance 0.89 W/m².nm (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	'Bostik P590 Seal 'N' Flex One Plus'	
	Marble	Granite
Staining On Porous Substrates Observation for Staining after		
a. Standard conditions, 23°C and 50% relative humidity, 14 days	No surface stain was observed	No surface stain was observed
b. Standard conditions, 23°C and 50% relative humidity, 28 days	No surface stain was observed	No surface stain was observed

Test, Heat Ageing in Oven	'Bostik P590 Seal 'N' Flex One Plus'	
	Marble	Granite
Observation for Staining after		
a. Heat ageing: 70°C in oven, 14 days	No surface stain was observed	No surface stain was observed
b. Heat ageing: 70°C in oven, 28 days	No surface stain was observed	No surface stain was observed

Test, UV Exposure	'Bostik P590 Seal 'N' Flex One Plus'	
	Marble	Granite
Observation for Staining after		
a. UV exposure, 14 days	No surface stain was observed	No surface stain was observed
b. UV exposure, 28 days	No surface stain was observed	No surface stain was observed

Ed *Yulians*



REMARKS:

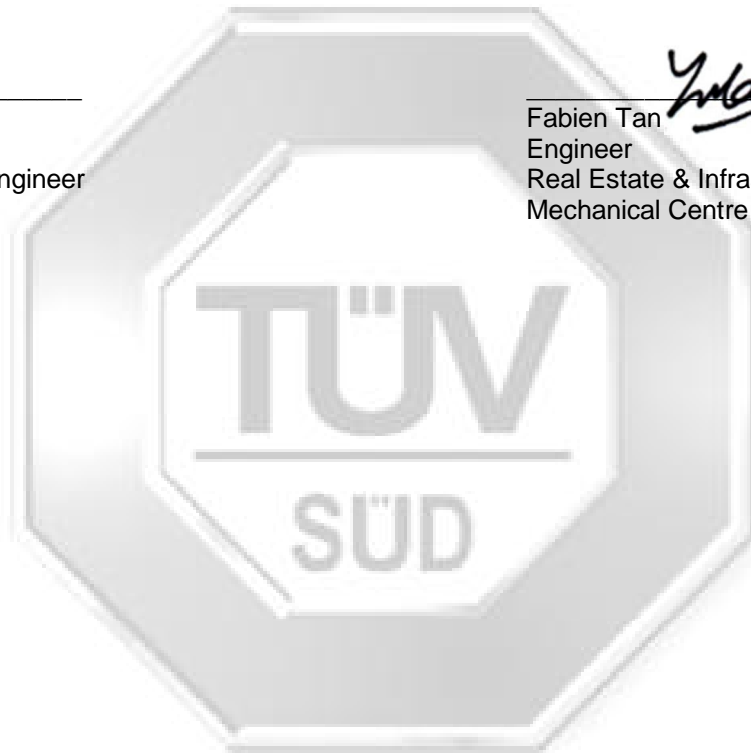
1. The test conditions were adopted from ASTM G154 : 2016 Standard Practice For Operating Fluorescent Light Apparatus For UV Exposure Of Non-Metallic Materials.
2. The test was requested by the client.
3. The substrates were provided by TUV SUD PSB Pte Ltd as agreed by the client.
4. The substrate types, size and quantity used are as follows:
 - a. marble, 75 mm x 25 mm x 25 mm, 24 pcs
 - b. granite, 75 mm x 25 mm x 25 mm, 24 pcs
5. The substrates did not require priming before application of the sealant as specified by the client.
6. The joint movement class was specified by the client.

Handwritten signature of Eddie Suwand in black ink.

Eddie Suwand
Testing Officer
Senior Associate Engineer

Handwritten signature of Fabien Tan in black ink.

Fabien Tan
Engineer
Real Estate & Infrastructure
Mechanical Centre



Test Report No. 7191256600-MEC21/02C-ED (221420468)
dated 18 Jun 2021

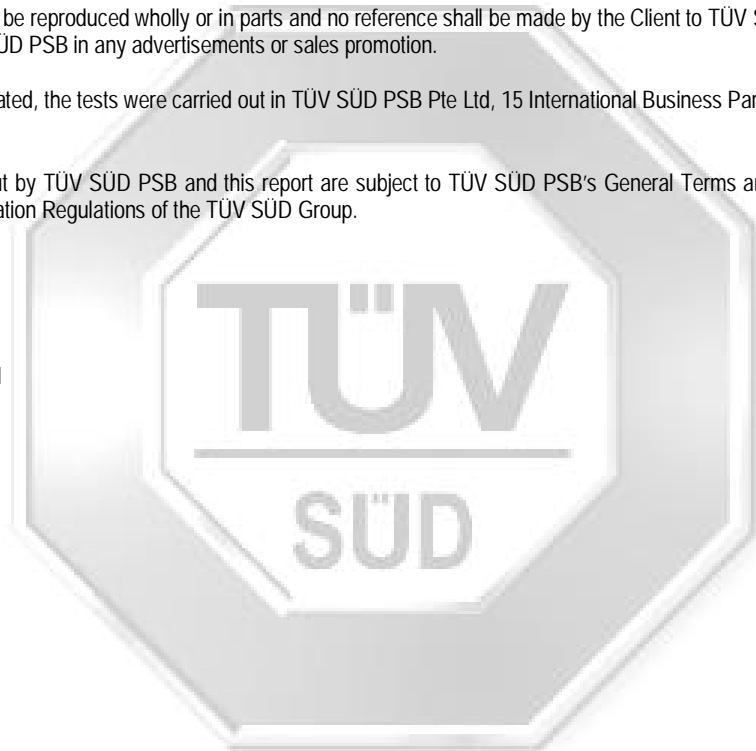


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Effective 26 January 2021





TEST REPORT

(This report is issued subject to the terms & conditions set out below)

Page 1 of 1

Your Ref:-	5500152594	Date: 16/07/2021
Our Ref:-	CHEM-203131-4	
Subject	SGBC requirement under Category for Sealants on sample submitted by Bostik Findley (Malaysia) Sdn Bhd on 01/07/2021, test commenced on 01/07/2021 and completed on 16/07/2021.	
Tested For:	Bostik Findley (Malaysia) Sdn Bhd Lot 112 & 113, Kawasan Perindustrian Senawang, 70450 Seremban, Negeri Sembilan, Malaysia Attention: Mr. Herman Chen	
Sample Description:	BOSTIK P590 (QPU 515)	

Clause	Test Parameter	Test Method	Unit	Result	Reporting Limit	SGBC Criteria	Justification
A4	Avoidance of Hazardous Substances:						
i)	Cadmium (Cd)	IEC 62321-5:2013	mg/kg	N.D.	10	<100	Pass
ii)	Lead (Pb)		mg/kg	N.D.	10	<1000	Pass
iii)	Mercury (Hg)	IEC 62321-4:2017	mg/kg	N.D.	10	<1000	Pass
iv)	Hexavalent Chromium (Cr ⁶⁺)	IEC 62321-7-2:2017	mg/kg	N.D.	10	<1000	Pass
A5	Specific Hazardous Substances:						
i)	Phthalates (BBP, DBP, DEHP, DIBP) & - DIDP - DINP	USEPA 3545:2007 & USEPA 8270:2018	%wt	N.D. & - 3.51 - N.D.	0.01	N.D. & - -	Pass & - -
ii)	Formaldehyde	In House Method	%wt	N.D.	0.01	N.D.	Pass
iii)	Alkyl phenol ethoxylates (APEOs)	LCMS	%wt	N.D.	0.01	N.D.	Pass
i)	Halogenated Solvents	ISO11890-2:2013	%wt	N.D.	0.01	N.D.	Pass
B1	VOC content						
i)	VOC Content	ISO 11890-2:2013	g/L	2.82	1	<25	Pass

Notes :	N.D. - Not Detected (< Reporting Limit)	RPL - Reporting Limit
	*Tests were done by subcontractor laboratory.	

Signed for and on behalf of STATS Asia Pacific Pte Ltd


LEI ZHI PEI
DIRECTOR

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SINGAPORE GREEN BUILDING PRODUCT CERTIFICATE

AWARDED TO

BOSTIK FINDLEY (MALAYSIA) SDN. BHD.

1 Science Park Road #04-01/05
The Capricorn
Singapore Science Park 2
Singapore 117528

FOR THE PRODUCT

Sealants

PRODUCT BRAND

BOSTIK

PRODUCT MODEL

P590(QPU515)

THE PRODUCT HAS BEEN ASSESSED ACCORDING
TO THE ASSESSMENT CRITERIA OF SINGAPORE
GREEN BUILDING PRODUCT CERTIFICATION SCHEME.
IT HAS BEEN AWARDED THE RATING:

Director
SGBC Pte Ltd



Certificate Number	Original Issue Date	Revised Date	Valid Till
SGBP 4302	29 July 2021	-	28 July 2023

✓Good ✓✓Very Good ✓✓✓Excellent ✓✓✓✓Leader

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