



# SMARTFLEX PU

## ONE COMPONENT, CLASS-B POLYURETHANE SEALANT

8<sup>th</sup> October 2018

### YOUR SMART ADVANTAGES

- Low modulus ( $\pm 25\%$  joint movement)
- Excellent durability
- One component, no mixing required
- Suitable for narrow joints, easy extrusion
- Paintable\* (refer to paintability section)

### DESCRIPTION & USES

**Bostik Smartflex PU** is a low modulus, one component, Class-B polyurethane sealant. When cured it will form a tough, flexible seal capable of cyclic expansion and compression movement of 50% ( $\pm 25\%$ ) of the original installed joint width.

It has excellent resistance to normal weathering conditions such as rain, sunlight, snow, sleet, ozone, atmospheric contamination and pollution

Can be used for:

- Insitu concrete and render
- Brickwork and block work
- Plasterboard face and paper lined recessed edges
- Fibre cement sheet
- Aluminium windows and general windows
- Granite, sandstone and marble

### CLASSIFICATION STANDARDS

- ISO 11600-Class F-25LM
- ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 25, use NT, G, A, M, & O as an external joint sealant.

### PRODUCT CHARACTERISTICS

Colours	Black, White & Grey
Viscosity	Non-sag, smooth thixotropic paste
Cure method	Moisture curing
Chemical resistance	Dilute acids, alkalis and some solvents. Intermittent contact with petroleum and diesel.
Coverage	Refer to coverage table

Application temperature	5 to 35°C
-------------------------	-----------

### Product codes

#### 600ml sausage/20 per carton

White	30612927
Grey	30612928
Black	30612926

### TYPICAL PERFORMANCE DATA (approx.)

Service temperature	-40 to 75°C
Tack free time	6-12 hours
Cure rate	2mm/24 hours on porous substrates
Full cure	7 days on porous substrates. Allow 14 days in joints over 20mm wide.
Specific gravity	1.25 g/ml
Shore A hardness	25
Tensile strength	> 1.2 N/mm <sup>2</sup>
Elongation at break	> 600%
Total joint movement	$\pm 25\%$
Maximum joint width	Up to 50mm

# BOSTIK SMARTFLEX PU

## DIRECTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting [www.bostik.com.au](http://www.bostik.com.au).

## SURFACE PREPARATION

1. 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
2. Dust and loose particles should be vacuum cleaned.

### Priming

Priming of all surfaces is recommended to achieve stated performance properties.

DO NOT USE METHYLATED SPIRITS OR TURPS.

### 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 Technical Data Sheet)
3. Porous substrates not subject to immersion or ponded water e.g. vertical expansion joints in concrete or masonry structures may 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 all 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 Smartflex PU** should be dispensed from a sausage by means of a caulking gun (available from Bostik).

### Sausage application:

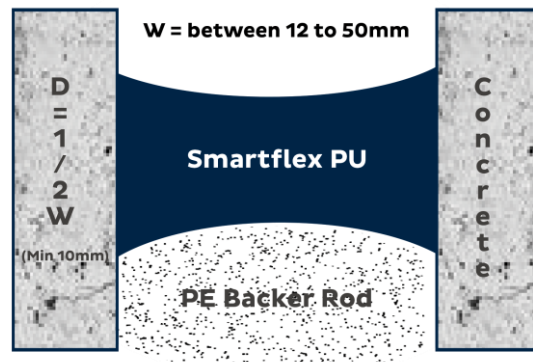
1. Clip the end of the sausage and place in a barrel gun
2. Screw the end cap and nozzle onto the barrel gun
3. Use the trigger to extrude the sealant. To stop; depress the catch plate.

Apply **Bostik Smartflex PU** 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 hints:

- Always use a backing rod for correct sealant geometry and contact with the substrate
- Prime after the installation of the backing rod
- Ensure maximum adhesion to bond face
- Minimum allowable joint depth is 6mm
- Maximum allowable joint width is 50mm

- Depth to width ration of 1:1 up to 12mm width and 1:2 from 12-50mm width
- Tool sealant to achieve concave shape



## 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 SIZE (D x W)	5mm x 5mm	10mm x 10mm	10mm x 20mm	25mm x 50mm
600ml Sausage	20	6	3	0.48

W=Joint width (mm), D=Joint depth (mm), L=Length (metres)

## CLEANING

The use of protective goggles, barrier creams and ointments, gloves and protective clothing is recommended. Cured material can be removed by mechanical means only. Clean off uncured material and equipment immediately after use using Bostik Handy Wipe towels to remove adhesive from skin.

### \*PAINTABILITY

**Bostik Smartflex PU** 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 Smartflex PU**. 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 Smartflex PU**.

## LIMITATIONS

Not recommended for:

- Use in chlorinated water such as swimming pools, spas, etc.
- Use on any material containing bitumen
- 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 35°C
- Exposure to water and/or alcohol before it has completely cured
- Finished using wet tooling techniques, using solvents, water or detergent/soap solutions

# BOSTIK SMARTFLEX PU

- Applied to joints less than 5mm in width and 6mm in depth
- Applied on joints larger than 50mm
- Allow 14 days for full cure in joints over 20mm in width.

**Bostik Smartflex PU** White may yellow on the surface if exposed to strong natural or artificial UV light for prolonged periods of time.

Composite metallic façade systems can be subject to significant daily cyclical movement due to temperature variations. Crimping and bulging of installed sealant before full cure may permanently deform the sealants finish prior to full cure, especially on Northern and Western elevations in full sunlight. Refer to **Bostik V70 Silicone** Technical Data Sheet as a recommended metal façade sealant.

## STORAGE AND SHELF LIFE

Store in cool (between 5°C to 30°C) dry, well-ventilated area out of direct sunlight. Store away from oxidizing agents and acids. Shelf life is 18 months in original unopened container.

## DISPOSAL

Empty foils may be disposed via local landfill. If spilt, absorb with clay, sand or earth. Collect and seal in properly labeled metal container. Dispose of according to local authority regulations. Do not dispose of down drains or into local waterways.

## VOC INFORMATION

91g/litre

## HEALTH AND SAFETY

**CAUSES SKIN IRRITATION.**

**MAY CAUSE AN ALLERGIC SKIN REACTION.**

**MAY CAUSE AN ALLERGY OR ASTHMATIC SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.**

Keep out of reach of children. Read label before use. Avoid breathing dust, fume, gas, mist, vapours or spray. Wash hands, face and all exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective clothing, gloves, eye/face protection and suitable respirator. In case of inadequate ventilation wear respiratory protection.

**Fire:** If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

**Spills and leaks:** Clear area of all unprotected personnel. Slippery when spilt. Wear protective equipment. Absorb with sand or soil. Collect and seal in

properly labeled drums. Dispose of contents/container in accordance with local, regional, national and international regulations.

If poisoning occurs, contact Poisons Information Centre.

## FIRST AID

**Swallowed:** Do not induce vomiting, give a glass of water and seek medical advice.

**Skin:** If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If irritation occurs, seek medical advice

**Inhaled:** Remove from contaminated area. Apply artificial respiration if not breathing. Seek medical advice.

**Eyes:** Hold eyes open and flood with water for at least 15 minutes and see doctor.

**For emergency information contact the Poisons Information Centre, phone 131 126 or the Emergency Response Service, phone 1800 033 111.**

BOSTIK HOTLINE

Smart help 1800 898 551



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](http://www.bostik.com/au)