



# Technical Data Sheet Fireban One

One Part Fire Rated Intumescent Polyurethane Joint Sealant

## DESCRIPTION

**Bostik Fireban One** is a fire rated intumescent, low modulus, one component, and Class-A polyurethane sealant. When cured it will form a tough, flexible fire rated seal capable of cyclic expansion and compression movement of 50% ( $\pm$  25%) of the original installed joint width. **Bostik Fireban One** is resistant to normal weathering conditions such as rain, sunlight, snow, sleet, ozone, atmospheric contamination and pollution. Its excellent weather ability enables it to retain its original properties after years of exposure, refer to the CSIRO RILEM LONG- TERM SEALANT DURABILITY STUDY DBCE Doc. 97/196 (M).



## FEATURES

- ✓ Fire Rated up to 4 hrs (1530.4-2005).
- ✓ Acoustic Rated.
- ✓ One component, no mixing required.
- ✓ Low modulus 50 %( $\pm$  25%).
- ✓ Excellent durability.
- ✓ Australian made.
- ✓ Paintable (refer limitations).
- ✓ Non staining.
- ✓ Does not support fungal growth

## RECOMMENDED USES

### Fire & Acoustic Rated sealing of joints in:

- ✓ Insitu concrete floors and walls.
- ✓ Precast and tilt up panels.
- ✓ Brickwork & blockwork.
- ✓ Rendered masonry.
- ✓ Plasterboard (Fire rated &/or Acoustic rated)
- ✓ Fibre cement sheet (Fire rated &/or Acoustic rated)

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

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. Dust and loose particles should be vacuum cleaned. Priming of all surfaces is recommended to achieve stated performance properties. DO NOT USE METHYLATED SPIRITS OR TURPS.

### PRIMING

#### POROUS SUBSTRATES

- Absorbent or porous substrates will allow a bead of water to easily soak into and wet out the surface of the substrate.
- For maximum performance on porous surfaces and, in all periodically immersed and submerged applications, use **Bostik N49 Primer**, or one coat of Bostik **MVP525**.
- Porous substrates not subject to immersion or ponded water, e.g. vertical expansion joints in external concrete or masonry structures or internal acoustic plasterboard applications, do not require priming if clean, dry and uncontaminated.

## CLASSIFICATIONS / STANDARDS

- ✓ Fire Test Certification AS 1530.4-2005, AS4072.1 and BS476-20 REF: CSIRO FLO 1785 and BOS S.02.
- ✓ CSIRO RILEM LONG - TERM SEALANT DURABILITY STUDY DBCE Doc. 97/196 (M).
- ✓ ISO 11600-Class F-25LM.
- ✓ DIN 18540 (German) and SNJF (French) approval as a low modulus external joint sealant.
- ✓ ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 25, use NT, G, A, M, &O as an external joint sealant.
- ✓ AS4020 Potable water.
- ✓ AS1157-1972 Resistance to fungal growth.
- ✓ BOMBA Approved (Malaysia).
- ✓ SISIR Approved (Singapore).

- Autoclaved aerated substrate, e.g. Hebel, require 1 to 2 coats of N49 primer or 2 coats of Moisture Seal to consolidate the substrate prior to sealant application.

## NON POROUS SUBSTRATES

- 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.
- **Bostik MVP525** is recommended for non-porous or burnished/overworked concrete substrate as per **Bostik MVP525** Technical Data Sheet.
- **Bostik N40 Primer** is recommended for non-porous plastic and metal substrates.
- Prime all plastics and metallic non-porous substrates with **Bostik N40 Primer** using the two-cloth method described below.
- E.g. UPVC outlets and pipe work: brass, copper fittings, stainless steel trays and flashings.

## TWO CLOTH METHOD – N40 PRIMER APPLICATION

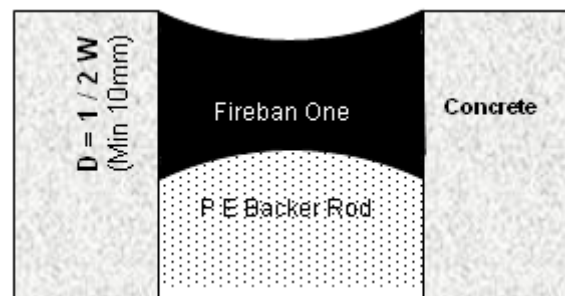
- Dampen a clean and dry cloth with **Bostik N40 Primer** and spread evenly over the non-porous substrate using a cleaning/rubbing action.
- With a second clean and dry cloth, immediately wipe all primer residues off with a buffing action.
- Allow the substrate to dry for a minimum of 5 minutes before installing **Bostik Seal 'N' Flex 1**.
- Do not leave the primer longer than 4 hours before applying sealant/adhesive.
- Re-prime if 4 hours has elapsed without applying sealant/adhesive
- Clean and re-prime if the primed surface is contaminated before **Bostik Seal 'N' Flex 1** is applied.

## APPLICATION

**Bostik Fireban One** should be dispensed from the sausage by means of a sausage barrel, available from Bostik. For sausages, clip the end of the sausage and place in barrel gun. Screw end cap and nozzle on to barrel gun. Using the trigger extrude the sealant, to stop depress using the catch plate. Apply **Bostik Fireban One** in a continuous bead using enough pressure to properly fill the joint. Tool off surface of 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

- Prime prior to the installation of the backing rod
- Always use backing rod for correct sealant geometry & contact with the substrate
- Ensure maximum adhesion to bond face and depth to width ratio of 1:1 for 10mm joints and 1:2 for joints over 10mm up to 40mm and 3:4 for some joints in specialist applications (refer to Application manual BOS 5.02 for specific joint Configurations).
- Tool sealant to achieve concave shape



## COVERAGE

The estimated quantity below is the approximate lineal metre yield, per pack size, for recommended joint dimensions. No allowance for waste or irregular joint geometry.

SIZE	10mm x 10mm	20mm x 10mm	40mm x 20mm
600ml	6	3	0.75

Calculation formula  $\frac{W \times D \times L}{1000} = \text{Litres}$

1000W = Width (mm) D = Depth (mm) L= Length (metres )

## PAINTABILITY

**Bostik Fireban One** can be painted after full cure. 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 Fireban One**. 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 Fireban One** (refer PATS).

## IMPORTANT NOTES

### Fireban One must not be:

- Used in chlorinated water such as swimming pools, spas etc.
- Used on any material containing bitumen.
- Be constantly immersed in salt water.
- Be used for glazing applications.
- Be applied to cement based substrates within 28 days of initial pour or set.
- Be used in trafficable joints greater than 10mm in width.
- Be applied at temperatures below 5°C or above 35°C.
- Be exposed to water and/or alcohol before it has completely cured.
- Be finished using wet tooling techniques, such as soapy water.
- Be applied less than 6mm in width and depth.
- Be applied as per **Installation Manual BOS 5.02** to ensure correct Fire Rated joint design & certifications

## BOSTIK CO-OPERATIVE TEST PROGRAM

Bostik offer a service in which a program has been established to eliminate potential field problems by pretesting Bostik adhesives with samples of building materials to which the adhesive will be applied. This service is available on large projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information.

## PROPERTIES

Typical properties after seven days cure at 25°C and 50%RH on correctly primed substrates.

<b>Colour/s</b>	Limestone Grey	<b>Rate of cure</b>	2 mm/24h on porous substrates
<b>Appearance</b>	Non-sag smooth thixotropic paste	<b>Hardness shore A</b>	30 approx.
<b>Cure Method</b>	Moisture Curing	<b>Specific Gravity</b>	1.45 g/ml
<b>Tack free time</b>	6-12 hours	<b>Tensile strength</b>	> 1.3 N/mm <sup>2</sup>
<b>Chemical resistance</b>	Resistant to dilute acids, alkalis & some solvents. Intermittent contact with diesel and petroleum.	<b>Application Temperature</b>	5°C to 35°C
<b>In Service Temperature range</b>	-40°C to +70°C	<b>Full cure</b>	7 days on porous substrates
<b>Elongation at break</b>	>900%		

## STORAGE & SHELF LIFE

Store between 5°C and 30°C. Shelf life is one year in original unopened sausage

## SAFETY PRECAUTIONS

**SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.**

**EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)**

**MSDS can be downloaded from [www.bostik.com.au](http://www.bostik.com.au)**



# Fireban One

## CLEAN-UP

Clean up uncured **Bostik Fireban One** and equipment immediately after use with **Bostik Handi Clean Towels**. Do not use towels on skin. Cured **Bostik Fireban One** can be removed by mechanical abrasion. Aromatic solvent clean up is not recommended.

## PACKAGING

**Bostik Fireban One** is supplied in 600ml sausages, 20 per carton.

## VOC – 64g/Lt

[voccertificates.australia@bostik.com](mailto:voccertificates.australia@bostik.com)

## PRODUCT DETAILS

ITEM NO	ITEM NAME	SIZE	COLOUR	PACK
224200	FIREBAN ONE	600ml (870gm)	LIMESTONE	SAUSAGE



The information in this Technical Data Sheet is intended for the assistance of purchasers and is of a general nature. It reflects the extent of our knowledge and experience of our products and is based on tests which we believe to be reliable. However, no guarantee of accuracy can be given due to the wide range of surfaces, environmental and field conditions and variations encountered in raw materials, manufacturing equipment and methods at the place where the work is performed. Some of these will be beyond our knowledge or control. We recommend purchasers carry out their own tests to determine the suitability of the product for their particular purposes. Bostik Australia Pty Ltd limits its liability to replacement of the products or refund of the purchase price, but this limitation does not affect consumers' rights which cannot by law be excluded.

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TS16949 (Automotive)

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