



PU91 POLYURETHANE

PROFESSIONAL GRADE NEUTRAL SILICONE SEALANT

Date: 15 March 2023

Fact Sheet No.: TDS02199

YOUR SMART ADVANTAGES

- Extremely elastic
- High modulus
- Bubble and Primer free
- Suitable for Interior and exterior use.

USES

BOSTIK PU91 SILICONE is a professional grade polyurethane, developed for construction joints subject to high movement. High modulus, elastic, bubble, and primer free and is suitable for interior and exterior applications.

BOSTIK PU91 POLYURETHANE demonstrates good adhesion to a wide range of construction materials. It is a universal sealant for sealing construction, expansion joints, perimeter, siding joints, precast concrete joints, modular housing and prefabrication, joints in pedestrian walkways and is suitable for roofing applications.

With excellent slump and sag properties, it is subject to minimal shrinkage and no outgassing during cure. The low MDI technology is not classified as hazardous. BOSTIK PU91 POLYURETHANE is excellent for weatherproofing exterior joints subject to high movement and remains permanently elastic. It is suitable for façade and expansion joints in both horizontal and vertical orientation.

Meeting the requirements of BS EN 15651:2017- parts 1 and 4; Sealants for façade and pedestrian walkway joints.

PRODUCT CHARACTERISTICS

Colour	White, Black, Grey, Brown
Form	Soft gunnable paste
Odour	Slight
Composition	Gel Polyurethane

Product Code	30623108	White	310ml x 12
Supplied in aluminium Cartridges	30623103	Black	310ml x 12
	30623104	Grey	310ml x 12
	30623143	Brown	310ml x 12

Storage/Shelf Life Up to 15 months. *

TYPICAL IN HOUSE PERFORMANCE DATA (Approx.)

100% modulus	1.0 N/mm ²
Application rate	125 g/min
Application Temperature	+5°C to +40°C
Curing time	2-3 mm/24 hours
Shore A Hardness	30 approx.
Density	1,3 g/ml
Elongation at break	>500%
Flow	< 1 mm
Joint movement	25%
Skin formation	90 minutes @ +23°C/50% RH Always tool sealant within the given skin formation time frame
Temperature resistance	-40°C to +120°C
Tensile strength	>1,6 N/mm ²

DIRECTIONS FOR USE

IMPORTANT: Before using BOSTIK PU91 POLYURETHANE refer to the relevant Health & Safety Data Sheet, available at www.bostik.com/uk

STORAGE CONDITIONS

*Store for up to 18 months from Production date when stored in original, unopened packaging under cool, dry conditions within the temperature range +5°C to +25°C and out of direct sunlight. Protect from frost.

PREPARATION

1. Work in warm (+5°C to +40°C) well-ventilated conditions.
2. Ensure you have all necessary materials required.
3. Joint surfaces must be clean, sound and free from dust, loose material and other contaminants that may impair adhesion. The product is tolerant of damp conditions, should the surfaces be awash considered discontinuing usage.
4. If desired, place masking tape along the joint edges before application. This can make it easier to make a neat, tooled finish and not contaminate nearby surfaces. Use a spatula with a round end to tool the sealant and check that it fits into the gap between the masking tape so that it catches the excess sealant.
5. Do a test run without applying any sealant to 'get a feel' for the difficult areas to seal such as corners and raised joints.

APPLICATION

1. Unscrew the nozzle if fitted, and using a suitable tool, carefully pierce the metal membrane contained in the thread of the cartridge, taking care not to damage or shorten the thread. Screw the nozzle onto the cartridge.
2. Cut off the tapered end of the nozzle at a 45° angle, to a width matching the gap to be sealed.
3. Fit the cartridge into the cartridge gun by pressing the release plate and pulling out the plunger. Insert cartridge and repeatedly squeeze the trigger until the sealant appears.
4. Place the nozzle at the start of the gap, and gently squeeze the trigger. Push forward slowly, ensuring that contact is made by the sealant with both sides of the gap. At the end of the run, release the trigger and press the plunger release plate of the gun to stop the flow of material.
5. A joint with the correct dimensions is essential to absorb movements between building materials. The joint depth should always be in the correct relationship of the joint width. Backer rod should be used to facilitate this.
6. A general rule is the ratio of joint depth to the width of the joint with a joint width up to 10mm is 1:1, with a minimum of 5 mm in width and depth.
7. For joints wider than 10 mm, the depth is the width divided by 3 plus 6 mm.
8. Within the working time of the product Smooth the sealant with a wet, round ended tool (do not use a wetted finger), remove any excess with a cloth moistened with white spirit and then remove the masking tape (if used) from either side of the bead.
9. If the application is in a damp or wet environment, the sealant must be tooled to allow the water to run off the surface.
10. After use, ensure to wipe away any excess sealant from the nozzle. Replace the cap if appropriate.
11. The sealant skins over slowly (approx. 90 minutes) and is fully cures through approx. 2-3 mm/ 24 hours depending on bead width, temperature, and humidity.

CLEANING

Uncured Sealant:

Excess uncured sealant should be removed mechanically using a soft scraper. The remainder can be removed using a cloth just moistened with white spirit or soapy water. Repeat using another clean cloth moistened with white spirit or soapy water.

Cured Sealant:

There is no adequate solvent; carefully cut away excess with a very sharp knife. Do not use solvent to remove product from skin – use soap and water.

* PAINTABILITY

BOSTIK PU91 POLYURETHANE is paintable with water based and most 2 component paints.

The use of solvent borne alkyd resin paints is not recommended as drying times are extended.

For best results the paint should be applied within a few days of application

PRECAUTIONS IN USE

BOSTIK PU91 POLYURETHANE cannot be applied to surfaces which have frost or ice on them. Do not use in swimming pools or under constant water immersion. Do not use for aquarium applications. Prevent entry of uncured sealant into drains or watercourses. Do not use on or against bitumen. Not suitable for bedding double glazed/insulating glass units into frames. Reserved for industrial and professional use.

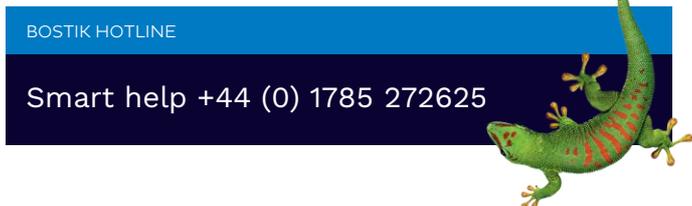
Not suitable for PE, PP, PC, PMMA, PTFE, soft plastics, neoprene, and bituminous substrates.

For any application not covered please contact Technical Services on +44 (0)1785 272625 or visit www.bostik.com/uk for advice.

Recommendations and suggestions are for guidance only, since conditions of use are completely beyond our control.

For health and safety instructions, first aid measures and spillage and disposal instructions see separate Health and Safety Data Sheet for BOSTIK S31 SILICONE, available at www.bostik.com/uk

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Façade Sealant, suitable for pedestrian walkways	Façade Sealant, suitable for pedestrian walkways



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