B1 Fire Sealant

JFIRESIL
Vol. 300ml

INFORMATION

The B1 Fire Sealant neutral silicone is one-component, elastic sealant curing in contact with humidity from the air, with fireresistant properties. As a system, the JCP B1 Fire Sealant and B1 Fire Stop Expanding Foam can be used where a fire resitance up to four hours (EI240) is required.

INTENDED USE

- Sealing Building And Construction Elements Made Of PVC
- Sealing Constructions Joints And Dilatation Joints In Constructions Elements
- Dilation In Fireproof Walls And Slabs
- Sealing Connections And Ducts Where Fire Protection Is Required
- Sealing Doors And Fireproof Barriers

FEATURES

- Excellent Adhesion (No Primer Needed) For Different Surface
- High Resistance To UV Radiation
- Does Not Contain Solvents
- Low Shrinkage
- Excellent Mechanical Properties
- Excellent Resistance To Changing Weather Conditions
- Good Adhesion To Most Building Materials, Both Non-Porous And Porous

APPROVALS

European Technical Assessment

ETA21/0413

Fire Resistance

ETA21/0413

RELATED PRODUCTS

JF750B1H
Vol. 750ml

JF750B1G
Vol. 750ml

B1 Fire Stop Expanding Foam

JF500C
Vol. 500ml

Polyurethane Cleaner
(For Un-cured Foam)

JFGUNC

Professional Applicator Gun
(For JF750B1G)

JFGUNB

Conventional Applicator Gun
(For JF750B1G)

TECHNICAL DATA (UNCURED)

GENERAL CHARACTERISTICS (+23°C/50% RH)		
PARAMETER	Dimension	Value
Density (ISO 2811-1)	g/ml	1.3-1.35
Skin formation time	min	5-10
Tack Free	min	5-10
Curing rate	mm/24h	2-3
Flow from vertical surfaces [+50°C] (ISO 7390)	mm	0-3

Technical Data Sheet

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Re00 July 2023

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TECHNICAL DATA (CURED)

GENERAL CHARACTERISTICS AFTER FOUR WEEKS (+23°C/50% RH)		
PARAMETER	Dimension	Value
Shrinkage (ISO 10563)	%	2-6
Module at 100% elongation (ISO 8339)	MPa	0.45-0.55
Elongation at break (ISO 8339)	%	120-250
Elastic recovery (ISO 7389)	%	80-95
Shore A hardness (ISO 868)	-	32-36
Colour	-	White

ADHESION TO SURFACE

ADHESION TO SURFACE DATA	
Material	Value
Aluminium	✓
Concrete	✓
Stainless steel	✓
Galvanised sheet	✓
Ceramic tile	✓
PS (polystyrene)	✓
PC (polycarbonate)	✓
Brick	✓
Granite	✓
Glass	✓
Clinker tile	✓
Raw wood (pine)	✓
Hard PVC (polyvinyl chloride)	✓

METHOD OF USE

Prior to application, read safety instruction presented at the end of TDS and in MSDS.

CONDITIONS OF APPLICATION		
PARAMETER	Dimension	Value
Application temperature	°C	+5 ÷ +40
Container temperature	°C	0 ÷ +25
Surface temperature	°C	+5 ÷ +40

- **Surface preparation:**
  - Bonding surfaces must be clean, dry (not frosted) free of dust, rust, old loose material, oil, grease, paint and other dirt which reduces the adhesion of the sealant.
  - Surfaces best degrease with acetone or ethanol (glass, glaze, metal) or detergent (synthetic materials).

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METHOD OF USE

• Surface preparation:

- To avoid dirtiness around the gap and to maintain equal line use adhesive tapes which should be removed immediately after finishing sealing.
- Sealant does not require using primer on most surfaces but on some specific surfaces may have to use it to improve adhesion.
- Joint width should be as to be able to carry movement in range calculated for sealant in question (movement accommodation).
- The sealant bead should not be wider than 25 mm and the minimum joint width should be 6 mm to allow in the construction field proper application and tooling of sealant. The ideal ratio of joint width:depth is 2:1.
- For proper design deep joints should be filled with back-up rod.
- In movable joints tripartite sealant adhesion to the surface should be avoided because it can damage it. For this purpose if depth of the slots does not allow introduction of polyurethane foam, use dilatation tape or back-up rod. Using foam or tape causes bipartite sealant adhesion and allows proper work with the joint.
- If joints are too shallow to allow backing material to be used, we recommend use of adhesive tape. This acts as a back-up rod to prevent seal in forming of three-sided adhesion.
- To obtain the best fire resistance, use mineral wool as a primer.

• Product preparation:

- The product that is too cold should be brought to room temperature, e.g. by leaving it at room temperature for at least 24 h.

• Application:

- Cut off the top of the threaded adapter. Screw the nozzle tip on and cut off at a 45° angle, with the diameter equal to the gap width.
- Cut off the top of the foil. Screw the nozzle tip on and cut off at a 45° angle, with the diameter equal to the gap width.
- Squeeze sealant by mechanical or pneumatic gun.
- Treatment make at the time of workability given in the technical data table.
- Applied sealant should be smoothed immediately with a spatula soaked in soapy water for best result.
- Remove masking tape before skin will form.
- Joint should be allowed to fully cure.

• Works after completion of application:

- Uncured product should be removed from hands, tools and dirty surfaces with paper towel.
- After curing, remove from hands with water and soap; from tools remove mechanically. or using agent for removing silicones - Silicone Remover.
- DO NOT WASH HANDS WITH SOLVENTS.

• Remarks / restriction:

- Do not apply on wet surfaces.
- Sealant should not be used on bituminous surfaces, partially vulcanized rubber, chloroprene or other construction materials that bleed oils, plasticizers or solvents.
- Sealant is not intended for sealing joints of natural stone, such as granite, sandstone, marble, etc.
- While planning of the joint, possibility of small discoloration of sealant on some surfaces and under influence of weather conditions should be taken into account.

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METHOD OF USE

• Remarks / restriction:

- Do not use in totally confined spaces where it is not exposed to atmospheric moisture, because the sealant requires atmospheric moisture for cure.
- Do not apply on sensitive metal surfaces for example copper and its alloys and silver steel of mirrors.
- Sealant is not recommended for joints that are permanently under water, because it can cause physical changes.
- Not suitable for bonding aquariums and terrariums.
- Sealant is not intended for applications involving structural glazing.
- It is not suitable for direct contact with food and medical uses. Sealant was not duly tested and it is not suitable for medical and pharmaceutical applications.
- Do not apply on PE, PP - no adhesion.
- Silicone should not be painted.

All given parameters are based on laboratory tests compliant with internal manufacturer's standards and strongly depend on product hardening conditions (c.a., ambient, surface temperature, quality of used equipment and skills of person applying the product).

TRANSPORT / STORAGE

The sealant maintains its usability within 18 months from manufacturing date, when stored in unopened, original package at temperature from +0 °C to +25 °C in a dry place protected from freezing.

SAFETY AND HEALTH PRECAUTIONS

All written or oral information, recommendations and instructions are given according to our best knowledge, tests and experience, in good faith and in compliance with manufacturer's principles. Each user of this material will make sure in every possible way, including verification of the final product in proper conditions, about suitability of the supplied materials for their intended purposes. The manufacturer is not liable for any losses incurred due to inaccurate or erroneous application of the manufacturer's materials.

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