

BRITCHEM FIRE RESISTANT SILICONE SEALANT

DESCRIPTION

BritChem Fire Resistant Silicone Sealant is a one-part silicone sealant formulated to provide a high degree of fire resistance in a variety of joint configurations. It has been independently tested and achieves, in certain joint configurations, an integrity AND insulation value in excess of 4 hours.

It exhibits excellent unprimed adhesion to most building components and is suitable for sealing a wide range of construction and expansion joints in buildings, where compartmentalisation within the building is required to control spread of fire. It cross-links at room temperature to give a flexible low modulus seal which will withstand movement of 25% in constant service throughout a wide temperature range.

It exhibits excellent primerless adhesion to a wide range of substrates such as glass, anodised and mill finished aluminium, steel, stainless steel, rigid PVC, concrete and other porous surfaces.

Once cured, the sealant offers superb long-term resistance to heat and fire as well as all other general weather elements.

APPLICATIONS

Typical applications include; expansion and construction joints in walls and cladding panels, sealing of service penetrations, roofing and conservatory applications, capping sealant for bead glazing, and general sealing work.

AVAILABLE PACK SIZES

Available in: 310ml cartridges & 600ml foil sausages.
Colours possible on request.

LIMITATIONS

Silicone sealants generally should not be used in situations where abrasion from pedestrian or vehicular traffic may be encountered, or for submerged joints in porous substrates, which may permit water to reach the bond interface.

Do not use for applications subject to contact with food products.

Do not use in the manufacture of aquariums or for sealing swimming pools.

Always check to determine suitability of the sealant on any surface that may give cause for concern.

TECHNICAL DETAILS

Specific gravity:	1.25 - 1.30
Skinning time:	10 minutes approx. (at 23°C and 50% relative humidity).
Tack free time:	20 minutes approx. (at 23°C and 50% relative humidity).
Full cure:	Approx 2-3mm per 24Hrs (at 23°C and 50% relative humidity).
Shore A hardness:	20 - 28
Extrudability g/min:	55 (standard NMRPS 495A 3mm/3 bars)
Movement accommodation:	25% (BS EN ISO 11600)

Mechanical properties on a 2mm thick film (NF T 46002)

Modulus at 100% elongation:	0.37 Mpa
Elongation at break:	550%
Tensile strength:	1.5 Mpa

Mechanical properties on glass slabs (EN 28339)

Modulus at 100% elongation:	0.32 Mpa
Elongation at break:	260%
Tensile strength:	0.55 Mpa
Application temp range:	+5°C to +40°C.
Service temp range:	-30°C to +150°C.
Slump resistance:	Excellent. May be used in joints up to 25mm wide and 12mm deep.
Shelf life:	Up to 9 months when stored in unopened cartridges under cool, dry conditions.
Life expectancy:	When used and applied correctly the sealant will perform in excess of 20 years.
Chemical resistance:	The cured sealant is unaffected by water, dilute acids and alkalis, soap and household detergents. Certain solvents may soften and swell the cured rubber on prolonged contact.

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STANDARDS

Meets ISO 11600 standard with the classification – ISO 11600-F&G-25LM.
Tested to BS EN 1366 part 4 at Warrington. Copy of report available on request.

APPLICATION INSTRUCTIONS

It is important to remember that correct application of the sealant is key to achieving the level of fire resistance commensurate with the test data.

Surfaces to which BritChem Fire Resistant Silicone Sealant is to adhere must be clean and free from loose material, standing water or contaminants which otherwise may impair the bond. Non-porous surfaces such as aluminium should be cleaned with a suitable product. For applications where movement will be exhibited i.e. construction joints, the minimum joint dimensions should be 6mm x 6mm with the maximum dimensions being 25mm wide by 12mm deep. Where deeper joints are found, depth can be reduced using a suitable backer rod. Areas of perimeter pointing where a fillet is to be applied, the minimum measurement across must be 10mm with a minimum depth of 6mm. If conditions are suitable for application ensure joints are properly prepared, and apply sealant firmly into the joint using an application gun. Ensure a good solid fill is achieved. Once applied, sealant can be tooled within 5 minutes to required finish.

COVERAGE

1 standard size cartridge is sufficient to seal approximately 8.5m with a 6mm x 6mm bead or 2.5 m with a joint dimension of 15mm x 8mm.

STORAGE

Store in dry conditions between 5°C and 25°C.

HEALTH AND SAFETY

Safety Data Sheets (SDS) available upon request. The SDS provides information and advice on the safe handling, storage, disposal of chemical products, physical and other safety-related data.

DO NOT EAT OR DRINK WHILE USING THE PRODUCT.

KEEP AWAY FROM CHILDREN AND ANIMALS.

FURTHER INFORMATION

The information given in this product data sheet is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable; each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.