



**Technical Data Sheet** 

# **FIRESILICONE B1 FR**

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#### **Technical Data:**

Base	Polysiloxane		
Consistency	Stable Pasta		
Curing System	Moisture Cure		
Skin Forming	Ca 20 min. (20℃/65% R.H.)		
Curing Rate	1mm/24h		
Shore A Hardness	16 Shore A		
Specific Gravity	Ca 1,17g/cm <sup>3</sup>		
Temperature Resistance	-40℃ until +140℃		
Elongation at Break	900% (DIN52455)		
E-Modulus 100%	0,20N/mm² (DIN52455)		
Elastical Recovery	>90% (DIN52455)		
Maximum Deformation	±25%		

#### Product:

Firesilicone B1 FR is a high quality, neutral, elastic, one-component sealant based on silicones which conforms to the DIN4102 B1 standard for fire retardancy and has a fire rating of up to 4 hours in certain joint configurations (EN 1366 Part 4 – NN713.020 – BS 476/20).

#### **Characteristics:**

- Very easy to apply
- Colourfast and UV-resistant
- Remains permanently elastic after full cure
- Very good adhesion on most surfaces
- Low modulus
- DIN 4102-Part 2: Class B1
- Up to 4 hours fire rating with normal PE backing material (see table enclosed)

# **Applications:**

All building and glazing joints which require a fire rating

Fire rated expansion joints

## Packaging:

Colour. grey, white

Packaging: cartridge 310mL, foil bag 600mL

## Shelflife:

9 months in unopened packaging in a cool and dry storage place at temperatures between  $+5^{\circ}$ C and  $+25^{\circ}$ . Do not expose to frost.

#### Surfaces:

Type: all usual porous and non-porous building

materiais

State of Surface: clean, dry, free of dust and grease *Preparation*: porous substrates should be primed with Primer 150. Soudal Surface Activator will improve adhesion on smooth surfaces.

We recommend a preliminary compatibility test.

### Joint Size:

Minimum Width: 5mm Maximum Width: 30mm

Joint configuration: width = 2x depth

## Application:

Method: caulking gun

Backing material: PE backer rods for correct joint

dimension

Application temperature: +1℃ to +30℃

Clean: with white spirit

Repair: with Firesilicone B1 FR Finish: with soapy solution

## **Health- and Safety Recommendation:**

Apply the usual industrial hygiene.

Remark: The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsability for the results obtained. In every case it is recommended to carry out preliminary experiments.

 Soudal NV
 Everdongenlaan 18-20
 2300 Turnhout, Belgium

 Tel.: +32 (0)14-42.42.31
 Fax: +32 (0)14-42.65.14
 www.soudal.com





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## Approvals:

- Test Report 9297 University of Ghent to
- NBN 713.020 EN 1366-4
- BS 476:Part 20 Warrington Fire Research Report
- DIN4102-B1 Institut für Bautechnik, Berlin
- TNO-rapport 2000-CVB-R00703

# Test Results – Test Report 9297:

Wall Thickness	Width of Joint	Depth of Joint	Application	Fire Rating
100mm	11mm	10mm	Doublesided	146 min. TI
				Rating El 120
				202 min. FR
				Rating E 180
100mm	33mm	20mm	Doublesided	116 min. TI
				Rating El 90
				187 min. FR
				Rating E 180
200mm	11mm	10mm	Doublesided	>240 min. TI
				>240 min. FR
				Rating El 240
200mm	31mm	20mm	Doublesided	225 min TI
				Rating El 180
				>240 min. FR
				Rating E 240

TI = Thermal Insulation; the time during which the temperature on the unexposed side of the wall does not rise by more than 180℃

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FR = Flame Resistance; the time during which the joints stops flames from penetrating the wall Fire Rating: Draft European Commission Decision RG N170 REV.1