

Gomastit Firesil 90

Gomastit Firesil 90 is a sealant based on pure silicone for fire protection movement and connection joints on various construction materials. Authorised by VKF with the corresponding standards.

Product advantages

- Simple processing
- High elasticity, good mechanical strength
- Extremely high UV, ageing and weather resistance
- Free of solvents and isocyanates
- Odourless
- Chemical neutral polymerisation
- Non-corrosive on surfaces
- Impact and vibration resistant (shock absorbing)
- Very wide adhesion range

Technical data

Chemical base	Oxime, neutral
Consistency, DIN EN ISO 7390	Stable, ≤ 3 mm
Mechanism of curing	1 comp. moisture curing
Shore-A-hardness, DIN 53505	22
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.4 N/mm ²
Elongation at break, DIN 53504 S2 *	ca. 500%
Tensile strength, DIN 53504 S2 *	ca. 1.0 N/mm ²
Tooling time	max. 10 min.
Curing rate after 24h	≥ 2.0 mm
Curing rate after 48h	≥ 3.0 mm
Density	1.41 +/- 0.05 g/cm ³
Volume change, DIN EN ISO 10563	≤ 6 %
Temperature resistance after curing	- 40 °C to + 150 °C
Application temperature	+ 5 °C to + 40 °C
Movement capability	25%
Elastic recovery, DIN EN ISO 7389, at elongation of 100%	≥ 70%

All measurements were performed under normal conditions (23 °C and 50 % relative humidity).

* The data are based on measurements after 7 days.

Application

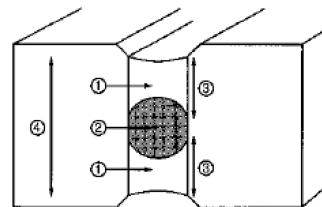
Suitable for connection joints, sealing of cable channels, pipe conduits and casings as well as general fire barriers and covers. Fulfils DIN 4102 class F90, F60, F30 with conventional round cords. Swiss fire protection approval of VKF no. 12497.

Substrate range

Suitable materials are metals, powder-coated, varnished, galvanised, anodised, chromed or hot zinc dipped surfaces, various plastics, ceramics, glass, concrete and wood. Due to the large variety of different plastics and compositions as well as materials which are susceptible to cracks, preliminary tests are recommended. Not suitable for natural stone work.

Meets the standards

- DIN 4102-2, fire resistance class F90
- EN ISO 846 method A+B, very good mold resistance
- ISO 11600-F25-LM
- ISO 11600-G25-LM
- VKF fire resistance class S90



- ① Gomastit Firesil 90
- ② Round cords PU open-cell

Fill joint gap on both sides

③ Layer thickness:

F 90 = 30 mm F 60 = 25 mm
F 30 = 20 mm

④ Panel thickness:

F 90 = 100 mm F 60 = 90 mm
F 30 = 80 mm

Technical data sheet Gomastit Firesil 90

Substrate preparation

Perfect sealing work requires correct joint dimensions and pre-treatment of the surfaces. For dimensioning of building construction joints see DIN standard 18540 and SIA standard 274. For maximum adhesion strength a dry, clean, grease free and structurally proper surface is required. On smooth, non-absorbent substrates a pre-cleaning with rubbing alcohol or isopropyl is recommended. Porous surfaces may need to be grinded, free of dust and cleaned. During renovations the old sealant must be removed as much as possible. The chemical base of the old sealant must be clarified. We recommend to consult our application engineers. The compatibility with adjacent materials, coatings etc. must be determined in advance.

Adhesion promoter

With most materials a good adhesion is achieved even without adhesion promoter. In the case of moisture influence on absorbent or difficult substrates, we always recommend the application of Adhesion Promoter V21 in advance. For non-absorbent substrates we recommend the application of Adhesion Promoter V2. For thermo-painted or powder-coated surfaces and plastic materials we recommend our Adhesion Promoter V40. Preliminary tests are recommended. Note: Adhesion promoter and thinly elapsed sealant leave stains that can not be completely cleaned.

Processing

- Prepare the joint according to the substrate preparation and pre-treatment description
- Observe and comply with the expiry date of all materials used
- Cut the nozzle tip according to the joint width
- Place container into suitable gun (manual, air, caulking gun)
- Apply the material bubble free into the joint
- The joint must be applied within the tooling time
- For joint smoothing we recommend using our tooling agent and if necessary joint tools
- Non-cured sealant can be removed with rubbing alcohol or isopropyl
- Cured sealant can only be removed mechanically

Paint compatibility

Not paintable. Compatible on components with coating agent. Due to the diversity of varnishes and paints on the market, we recommend preliminary tests.

Chemical resistance

- Good against water, aliphatic solvents, oils, grease, diluted inorganic acids and alkalis
- Moderate against esters, ketone and aromatics
- Not resistant against concentrated acids and chlorinated hydrocarbons

Colours

- concrete grey
- black
- white
- other colours on request

Packaging

- Cartridges of 310 ml in boxes of 12 units
- Sausages of 600 ml in boxes of 12 units

Shelf life and storage conditions

- 18 months from date of production in original packaging
- Store cool and dry (10 - 25 °C)
- Further information on request

Work and environmental safety

Important information about work and environmental safety is available on the material safety data sheet.

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