Technical data sheet

Gomastit®

Gomastit FireSeal MS 90

Gomastit FireSeal MS 90 is an permanently elastic SMP-based joint sealant with a fire resistance of up to 120 minutes. Tested and classified for all joint orientations according to EN 1366-4. The paint-compatible and permanently elastic sealant with very low volume shrinkage meets the highest demands in the fire protection sector. The very low emissions allow safe application in interior areas.

Product advantages

- Fire resistance up to 120 minutes
- Fire index 5.3
- Hardly combustible
- Low smoke formation
- Compatible with paint
- Low shrinkage
- Very good sealing properties
- Solvent- isocyanate- silicone-free
- Simple processing
- Odourless
- Very suitable for Minergie-ECO

Technical data

Chemical base	Silane modified polymer
Mechanism of curing	1 comp. moisture curing
Consistency, DIN EN ISO 7390	Stable, ≤ 3 mm
Tooling time	max. 15 min.
Curing rate after 24h	≥ 3.0 mm
Curing rate after 48h	≥ 4.5 mm
Shore-A-hardness, DIN ISO 7619-1	26
Tensile strength DIN 53504 S2*	ca. 1.5 N/mm²
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.9 N/mm²
Elongation at break, DIN 53504 S2 *	ca. 225%
Density	1.47 ± 0.05 g/cm³
Volume change, DIN EN ISO 10563	≤ 3%
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 40 °C
Elastic recovery, DIN EN ISO 7389, at elongation of 60%	≥ 60%
Movement capability	20%

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 joints in non-load-bearing building components with fire resistance requirements.
The sealant is suitable for linear joint sealants of unlimited length and the following end-use conditions:
- Joint in horizontal construction
- Vertical joint in vertical construction
- Horizontal joint in vertical construction
- Horizontal wall joint adjacent to a floor, ceiling or roof
- Horizontal floor joint adjacent to a wall

Substrate range

Suitable materials are metals, powder-coated, varnished, galvanised, anodised, chromed or hot zinc dipped surfaces, various plastics, ceramics, 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, for use on deck strips of copper and window sealings.

Meets the standards

- Fire protection code number 5.3
- EN 13501-2: Up to EI 120
- eco-bau 1st priority ECO-BKP
- EMICODE EC1Plus
- Eurofins IAC Gold
- IMO FTPC Parts 2+5
- ISO 11600-F20-HM
- VKF recognition Nr. 31357

Ergebnisse Bauteil Stahl zu Porenbeton; Hinterfüllung mit normaler PU-Rundschnur offenzellig
Results of steel component on aerated concrete; Backfilled with normal open-celled PU round cord

Ausrichtung / Orientation	Fugenbreite / joint width (mm)	Fugentiefe / joint depth (mm)	Feuerwiderstand / fire resistance
Wand vertikal / Vertical wall	10-50	20	EI60
	10-50	10	EI30
Wand horizontal / horizontal wall	10-50	20	EI90
	10-50	10	EI60
Decke horizontal / horizontal ceiling	10-50	20	EI30
	10-50	10	EI30

Ergebnisse Bauteil Porenbeton zu Porenbeton; Hinterfüllung mit normaler PU-Rundschnur offenzellig
Results of aerated concrete on aerated concrete; Backfilled with normal open-celled PU round cord

Ausrichtung / Orientation	Fugenbreite / joint width (mm)	Fugentiefe / joint depth (mm)	Feuerwiderstand / fire resistance
Wand vertikal / Vertical wall	10-50	20	EI120
	10-50	10	EI30
	10	10	EI120
Wand horizontal / horizontal wall	10-50	20	EI120
	10-50	10	EI90
	10	10	EI120
Decke horizontal / horizontal ceiling	10-50	20	EI120
	10-50	10	EI60
	10	10	EI120

Technical data sheet Gomastit FireSeal MS 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
Due to the diversity of varnishes and paints on the market we recommend preliminary tests. Using paints based on alkyd resins may delay the drying process. If applied on painted or plastered substrates a sufficient drying time of the paint / plaster must be kept (in general 10 days). After cleaning with acetone joints can be varnished at any time.

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
- white
- black
- other colours on request

Packaging
- Cartridges of 310ml 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.

merz+benteli ag

Freiburgstrasse 616
CH - 3172 Niederwangen
Phone +41 31 980 48 48
Fax +41 31 980 48 49
info@merz-benteli.ch
www.merz-benteli.ch

Last Update: 11.01.2022