Technical data sheet

Gomastit®

Gomastit 405

Elastic, 1-component silicone sealant, resistant to very high temperatures, acid curing system, moisture curing.

Product advantages

- Temperture resistant up to 300°C
- Simple processing
- High elasticity, good mechanical strength
- Extremely high UV, ageing and weather resistance
- Free of solvents and isocyanates
- Very wide adhesion range

Technical data

Chemical base	Acetate, acid
Mechanism of curing	1 comp. moisture curing
Shore A hardness, DIN 53505	30 ± 3
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.5 N/mm²
Elongation at break, DIN 53504 S2 *	ca. 600%
Elastic recovery, DIN EN ISO 7389, at elongation of 100%	80 – 90%
Tensile strength, DIN 53504 S2 *	ca. 1.7 N/mm²
Movement capability	15 – 20%
Consistency, DIN EN ISO 7390	stable, ≤ 3 mm
Tooling time	5 – 10 min.
Curing rate after 24h	≥ 3.0 mm
Curing rate after 48h	≥ 3.5 mm
Density	1.21 ± 0.05 g/cm³
Volume change, DIN EN ISO 10563	< 7%
Temperature resistance after curing	- 40 °C to + 300 °C
Application temperature	+ 5 °C to + 40 °C

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

* The data are based on measurements after 7 days.

Application

For flexible bonding and sealing of elements exposed to high temperatures. In the construction of heating systems, stoves, ovens and chimneys. Not suitable for non-ferrous metals and concrete.

Substrate range

Suitable materials are metals, powder-coated, varnished, galvanised, anodised, chromed or hot zinc dipped surfaces, various plastics and ceramics. Not suitable for nonferrous metal and concrete. 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.

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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
- red

Packaging
- Cartridges of 310 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

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As of: 16.05.2018