Technical data sheet



Merbenit 2K20

Merbenit 2K20 is a self-leveling 2-components sealing compound based on SMP. Handling strength achieved after 4h, even on moisture-impermeable substrates.

- Product advantages
 Chemical neutral polymerisation
 Wide adhesion range
- Free of solvents, isocyanates and silicones
- Self-leveling
- Fast and homogeneous complete curing
- Permanently elastic and low-modulus
- Very good sealing properties
- Non-corrosive on surfaces
- Impact and vibration resistant (shock absorbing)

Technical data

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Chemical base	Silane modified
	polymer
Mechanism of curing	2 comp.
	moisture curing
Shore A hardness, DIN 53505	30
Modulus elongation at 100%,	ca. 0.3 N/mm²
DIN 53504 S2	
Elongation at break, DIN 53504 S2	ca. 300%
Tensile strength, DIN 53504 S2	ca. 1.0 N/mm²
Consistency	self-leveling
Tooling time	max. 30 min.
Density Component A	$1.39 \pm 0.05 \text{ g/cm}^3$
Density Component B	1.48 ± 0.05 g/cm ³
Volume change, DIN EN ISO 10563	≤ 4%
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 40 °C

All measurements were performed under normal conditions (23 $^{\circ}\text{C}$ and 50 % relative

The data are based on the results after 7 days.

Application

Horizontal casting, filling, covering and sealing. Replenishing and protecting joints. Squeeze type sealants in casing lids. Counterbalancing tolerances.

Substrate range

Suitable materials are metals, powder-coated, varnished, galvanised, anodised, chromed or hot zinc dipped surfaces and various plastics. Due to the large variety of different plastics and compositions as well as materials which are susceptible to cracks, preliminary tests are recommended.

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Substrate preparation

To achieve reproductible results the substrate has to be pre-treated according to the state of technology. All undefined surfaces must be removed using suitable methods. Apply the adhesive/sealant promptly to the prepared surface. Depending on the substrate and the expected requirements a mechanical or chemical pre-treatment is recommended respectively cleaning with rubbing alcohol, isopropyl or acetone. For application the surface has to be clean, durable and free of dust, oil and grease. The compatibility with adjacent materials, coatings etc. must be determined in advance.

Adhesion promoter

In the case of high moisture influence we recommend our Adhesion Promoter V40 on non-porous materials, Adhesion Promoter V21 on open porous materials. For thermo-painted or powder-coated surfaces and plastic materials we recommend our Adhesion Promoter V40. Preliminary tests are recommended.

Processing

- Processing out of cartridges:
 - Open closure of the cartridge. Place cartridge in proper gun and squeeze until both components are flowing evenly. Wipe off excess. Place the static mixer nozzle and apply the material. Ensure the exiting material has a uniform colour.
- For application with a pneumatic gun a maximum pressure of 3 bar shall be used
- Can be applied with automatic dispension equipment
- Depending on the bonding surface, material expansion, tension and mechanical stresses a layer thickness of 1 - 6 mm is recommended
- Mixing ratio 1:1
- Non-cured adhesive can be removed with rubbing alcohol or isopropyl
- Cured adhesive 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. 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

- black
- other colours on request

Packaging

Double cartridges of 2x 200 ml in boxes of 15 units

Shelf life and storage conditions

- 12 months from date of production
- 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 Our information is based on experiences in lab and practice. Their publication occurs, however, without takeover of a liability for damages and losses which are to be put down to these information, as there the practical application conditions are lying outside of the enterprise's control. The user is not released from the necessity to carry out own attempts for the planned applications under practical conditions. Due to the different materials, processing methods and local factors onto which we have no influence, no guarantee – also in patent-legal respect – can be taken over. We recommend therefore sufficient own attempts. By the way we refer to our General Business Conditions. Technical changes reserved. Contents examined and released by merz+bentell ag, CH - Niederwangen/Berne