# 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**

Chemical base	Silane modified polymer
Mechanism of curing	2 comp. moisture curing
Consistency	self-leveling
Tooling time	max. 30 min.
Shore-A-hardness, DIN ISO 7619-1	30
Tensile strength DIN 53504 S2*	ca. 1.0 N/mm²
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.3 N/mm²
Elongation at break, DIN 53504 S2 *	ca. 300%
Volume change, DIN EN ISO 10563	≤ 4%
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 40 °C
Density, Component A	$1.39 \pm 0.05 \text{ g/cm}^3$
Density, Component B	1.48 ± 0.05 g/cm <sup>3</sup>

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

### Application

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

#### Substrate range

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.

humidity).
\* The data are based on measurements after 7 days.

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#### Substrate preparation

To achieve reproductible results the substrate has to be pretreated 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 Adhesion Promoter V40. Preliminary 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 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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