

Merbenit 2K10

Merbenit 2K10 is a 2-component adhesive that achieves regardless of the humidity high strength. Adheres thanks to SMP base to various, even on moisture-impermeable materials and substrates. Merbenit 2K10 can be processed very long.

Product advantages

- Chemical neutral polymerisation
- Wide adhesion range
- Free of solvents, isocyanates and silicones
- Paintable
- Fast curing through at room temperature
- Permanently elastic from - 40°C to + 90°C
- Very good sealing properties
- Excellent weathering and ageing resistance
- Corrosion protecting
- Vibration absorbing
- Odourless
- Tolerance compensating

Technical data

Shore A hardness, DIN 53505	45
Modulus elongation at 100%, DIN 53504 S2	ca. 0.6 N/mm ²
Elongation at break, DIN 53504 S2	ca. 300%
Tensile strength, DIN 53504 S2	ca. 1.8 N/mm ²
Consistency	stable
Tooling time	max. 30 min.
Density Component A	1.37 ± 0.05 g/cm ³
Density Component B	1.36 ± 0.05 g/cm ³
Volume change, DIN EN ISO 10563	≤ 10%
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 40 °C

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

Application

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, car body, wagon, vehicle and container construction. Tension peaks on assembly parts are avoided by plane bonding. The neutral polymerisation allows a connection without thermal or chemical pre-treatment of the assembly parts.

Substrate range

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

Technical data sheet Merbenit 2K10

Substrate preparation

To achieve reproducible 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, isopropanol or acetone. For application the surface has to be clean, durable and free of dust, oil and grease.

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 V40 in advance. For thermopainted or powder-coated surfaces we recommend our Adhesion Promoter V40. In the case of special plastics an improvement of the adherence can be achieved with Adhesion Promoter V30.

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. Put the static mixer nozzle and apply the material. Ensure the exiting material has a uniform colour (light grey or black).
- For application by pneumatic gun use a maximum pressure of 3 bar
- Can be applied with automatic dispensing 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 isopropanol
- 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. For burning process the material can be exposed, when fully cured, in short term to elevated temperatures.

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
- grey
- other colours on request

Packaging

- Mixpac cartridges of 250 ml in carton of 12 units
- Double cartridges of 2x 200 ml in carton of 15 units

Shelf life and storage conditions

- 12 months from date of production
- Store cool and dry
- 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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