Technical data sheet

Merbenit 2K60

Merbenit 2K60 is a permanently elastic 2-component adhesive with a very fast strength build-up and very good adhesion properties, especially on synthetics which are difficult to bond.

Product advantages

- Fast strength build-up, handling strength achieved after 30 minutes
- Compatible with paints
- Simple processing
- Corrosion protecting
- Free of solvents, isocyanates and silicones
- Odourless
- Non-corrosive on surfaces
- Impact and vibration resistant (shock absorbing)
- Very wide adhesion range
- Very good sealing properties

Technical data

Chemical base	Silane modified polymer
Mechanism of curing	2 comp. moisture curing
Shore A hardness, DIN 53505	48
Modulus elongation at 100%, DIN 53504 S2	ca. 2.0 N/mm²
Elongation at break, DIN 53504 S2	ca. 150%
Tensile strength after 1h, DIN 53504 S2	ca. 1.3 N/mm²
Tensile strength after 7d, DIN 53504 S2	ca. 3.0 N/mm²
Consistency	slightly thixotropic
Tooling time	max. 4 min.
Density	1.37 ± 0.05 g/cm³
Volume change, DIN EN ISO 10563	≤ 8%
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 40 °C
Temperature of the substrate	+ 5 °C to + 40 °C
Shear strength	ca. 3.0 N/mm²

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

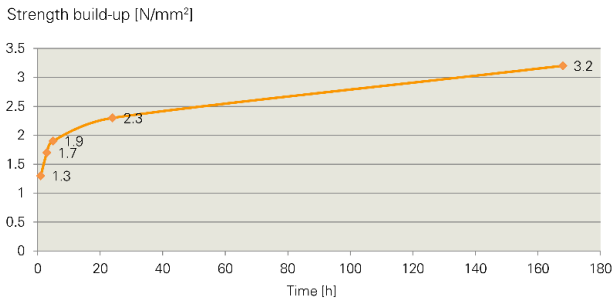
The data are based on the results after 3 months.

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. Thanks to fast cross-linking it is possible to bond parts in a continous working process. The neutral polymerisation allows a connection without thermal or chemical pre-treatment of the assembly parts. Counterbalancing tolerances.

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 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. For application the surface has to be clean, durable and free of dust, oil and grease. 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. 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 V40 in advance. 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 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
- light grey
- 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.

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