Technical data sheet



Merbenit SK212 FAST

Merbenit SK212 FAST is an elastic adhesive with high initial tack and strength. Thanks SMP base especially suitable for bondings where short handling strength is required; for example for bonding windscreens on vehicles. Merbenit SK212 FAST is certified after FMVSS212.

Product advantages

- Very high initial adhesion
- Free of solvents, isocyanates and silicones
- Adjustable
- Fast complete curing
- Permanently elastic from 40°C to + 90°C
- Very high mechanical strength
- Very good sealing properties
- Very good sealing propertiesVery wide adhesion range
- Odourless
- Compatible with paints
- Chemical neutral polymerisation
- Shortly resistant up to +200°C for powder and thermal coating
- Impact and vibration resistant (shock absorbing)
- Resists thermal expansion and material tension

Technical data

Chemical base	Silane modified polymer
Mechanism of curing	1 comp. moisture curing
Consistency	stable
Tooling time	max. 10 min.
Curing rate after 24h	≥ 3.5 mm
Curing rate after 48h	≥ 4.5 mm
Shore-A-hardness, DIN ISO 7619-1	55
Tensile strength DIN 53504 S2*	ca. 3.0 N/mm²
Modulus elongation at 100%, DIN 53504 S2 *	ca. 1.5 N/mm²
Elongation at break, DIN 53504 S2 *	ca. 325%
Density	1.33 ± 0.05 g/cm ³
Volume change, DIN EN ISO 10563	≤ 3%
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 humidity).

Application

Bonding of windscreens in vehicle, wagon and cabin construction. For non-supported bonds and where a fast, continuous working process is required. Flexible, immediate supporting bond in the area of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, car body, wagons, vehicles and container construction.

Substrate range

Suitable materials are metals, powder-coated, varnished, galvanised, anodised, chromed or hot zinc dipped surfaces, various plastics, ceramics, glass, 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. Compatible with polystyrene (EPS/XPS).

Meets the standards

- EMICODE EC1Plus
- FMVSS 212 30' drive away time

^{*} The data are based on measurements after 3 months.

Technical data sheet Merbenit SK212 FAST

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

Windows with ceramic coating must be cleaned with isopropyl. Adhesion promoters are not required. Windows without ceramic coating must be cleaned with isopropyl and then prepared with adhesion promoter Black Glass. Clean the substrate surface with isopropyl and if necessary pre-treat with adhesion promoter V40. Preliminary tests are recommended.

Processing

- Can be applied directly from the cartridge / bag using a suitable caulking gun (manual, air, battery)
- The application with thrust piston or telescope is recommended
- V-nozzles are recommended for bonding applications
- Depending on the bonding surface, material expansion, tension and mechanical stresses a layer thickness of 1 - 6 mm is recommended
- The bonding must take place within the processing time
- Can be applied with automatic dispension equipment
- 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. 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

Packaging

- Cartridges of 290 ml in boxes of 12 units
- Sausages of 600 ml in boxes of 12 units

Shelf life and storage conditions

- 15 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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