Technical data sheet



Merbenit RV30

Merbenit RV30 is an elastic sealant, suitable for applications in rail vehicle construction. Fulfills the Hazard levels HL1 and HL2 according to EN 45545-2, requirements R22 + R23 and can therefore be used for sealants where fire safety is important.

Product advantages

- Fire behavior according to EN 45545-2, R22 + R23, Hazard Level 1,2
- High UV, aging and weathering resistance
- Long processing time
- Very wide adhesion spectrum
- Paint compatibility
- Free from solvents, isocyanates, silicones, phthalates
- Free from halogenated flame retardants
- Very low emission
- Non-corrosive to surfaces
- Very low volume shrinkage
- Easy processing
- Tolerance compensating

Technical data

| Tooling time | max. 15 min. |
|--|-------------------------------|
| Curing rate after 24h | ≥ 3.0 mm |
| Curing rate after 48h | ≥ 4.5 mm |
| Shore-A-hardness, DIN ISO 7619-1 | 26 |
| Tensile strength DIN 53504 S2* | ca. 1.5 N/mm² |
| Modulus elongation at 100%, DIN 53504 S2 * | ca. 0.9 N/mm² |
| Elongation at break, DIN 53504 S2 * | ca. 225% |
| Density | 1.47 ± 0.05 g/cm ³ |
| Volume change, DIN EN ISO 10563 | ≤ 3 % |

All measurements were carried out under standard conditions (23 °C and 50 % relative humidity). The data are based on measurements after 7 days.

Application

Suitable and tested for flame retardant sealing of components in the interior and exterior of rail vehicles in accordance with fire protection standard EN 45545-2, R22 + R23. Merbenit RV30 meets the requirements for hazard levels HL 1 and HL 2. Merbenit RV30 is non-toxic, low-odor and very easy to process.

Substrate range

Well suited materials are metals, powder coated, painted, galvanized, anodized, chromated or hot-dip galvanized surfaces galvanized surfaces, various plastics, ceramics, concrete and wood. and wood. Due to the large variety of different and compositions, as well as for materials that are prone to stress materials that are prone to stress cracking, preliminary tests are recommended.

Meets the standards

- EMICODE EC1Plus
- Eurofins IAC Gold
- EN 45545-2, R22 + R23, Hazard Level 1 and 2 (toxicity according DIN EN 17084, smoke density according DIN EN ISO 5659-2, oxygen indes according to DIN EN ISO 4589-2)

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Substrate preparation

In order to achieve reproducible results, the substrate must be prepared

must be prepared according to the state of the art. The substrate must be load-bearing, free of dust, oil and grease before the the sealant, the substrate must be load-bearing and free of dust, oil and grease.

All undefined surfaces must be removed by means of a suitable process.

removed by means of a suitable process and the sealant applied to the prepared prepared surface as soon as possible. Depending on the part to be joined and the expected requirements, mechanical and/or chemical

and/or chemical pretreatment or cleaning using cleaning alcohol, isopropanol or acetone is recommended. The compatibility with adjacent materials, coating materials, etc. must be clarified in advance.

Adhesion promoter

For many materials, good adhesion is achieved even without adhesion promoter. In the case of high moisture exposure, the use of use of Adhesion Promoter V40 on closed-pore materials and Adhesion Promoter V21 on open-pore materials. For thermolacquered or powder-coated surfaces as well as plastics plastics, we recommend Adhesion Promoter V40. Preliminary tests are recommended. Note: Adhesion promoter and thinly sealant leave stains which can no longer be completely removed. which can no longer be completely removed.

Processing

- Observe the expiration date of all materials used and adhere to them
- Cut nozzle tip according to joint width
- Place container in suitable gun (hand gun, compressed air gun, battery gun)
- The joint must be created within the processing time including smoothing of the surface.
- For smoothing the joints, we recommend using our smoothing compound and, if necessary, jointing tools
- Uncured sealant can be removed with cleaning alcohol or isopropanol.or isopropanol

Paint compatibility

Due to the variety of paints and coatings available on the market, we recommend preliminary tests. With alkyd resin paints drying delays may occur. After cleaning with acetone can be recoated at any time. For stoving processes After complete curing, the compound may be exposed to elevated exposed to elevated temperatures for a short time after complete curing.

Chemical resistance

- Good against water, aliphatic solvents, oils, greases, dilute inorganic acids and alkalis
- Moderately resistant to esters, ketones and aromatics
- Not resistant to concentrated acids and chlorinated hydrocarbons.
- Resistant to weathering and aging

Colours

- white
- grey
- black
- other colours on request

Packaging

- Cartridges à 310 ml in cartons à 12 pieces
- Further information on request

Shelf life and storage conditions

- 18 months from production date in original packaging
- Store in a cool and dry place (10 25 °C)
- Further information on request

Work and environmental safety

For important information about occupational and environmental safety

and disposal can be found in the safety data sheet.



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