

## Merbenit RV30

**Elastic sealant for flame-retardant sealing. Suitable for applications in rail vehicle construction, complies with hazard levels HL1 and HL2 according to EN 45545-2, requirement sets R22 + R23, and can be used for sealing where fire safety is important.**

### Product advantages

- Fire behaviour according to EN 45545-2, R22 + R23, Hazard Level HL1 and HL2
- High UV, ageing and weather resistance
- Very wide adhesion range
- Paint-compatible
- Without addition of solvents, isocyanates, silicones or phthalates
- Without addition of halogenated flame-retardants
- Easy to process
- Very low emissions
- Non-corrosive on surfaces
- Very low volume shrinkage
- Tolerance-compensating

### Technical data

Tooling time	max. 15 min.
Curing rate after 24h	ca. 2.0 mm
Curing rate after 48h	ca. 3.0 mm
Shore-A-hardness, DIN ISO 48-4	ca. 26
Tensile strength DIN 53504 S2*	ca. 1.5 N/mm <sup>2</sup>
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.9 N/mm <sup>2</sup>
Elongation at break, DIN 53504 S2 *	ca. 225%
Density	1.47 ± 0.05 g/cm <sup>3</sup>
Volume change, DIN EN ISO 10563	≤ 3 %

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

### Application

Suitable for flame-retardant sealing, tested for flame-retardant sealing in accordance with EN 45545-2 Component No. EX12 Seals for outdoor use and Component No. IN16 Seals for indoor use for longitudinal seals such as window seals, door seals or panel joints, unlabelled, low odour and very easy to work with.

### Substrate range

Suitable materials include metals, thermal coated, painted, galvanised, anodised, chromated or hot-dip galvanised surfaces, various plastics, ceramics, concrete, plaster, wood, glass, painted surfaces, etc. Due to the wide variety of different plastics and compositions, as well as materials that are prone to stress cracking (PC, PMMA), preliminary tests are recommended. Please also refer to the section on primers.

Materials that are not suitable include PP, PE, PTFE (Teflon), silicones, bituminous substrates.

In case of high temperatures of metal profiles, deck strips or copper deck strips exposed to the sun, our neutral-curing silicones Gomastit 400 and Gomastit 407 are ideal.

Preliminary tests are always recommended for unknown applications!

### Meets the standards and certificates

- EN 45545-2, R22 + R23, Hazard Level 1 et 2 (toxicité selon la norme DIN EN 17084, densité de fumée selon DIN EN ISO 5659-2, indice d'oxygène selon DIN EN ISO 4589-2)
- EMICODE EC1Plus
- Eurofins IAC Gold

To qualify your product, please note that an appropriate test certificate must be issued on your name for most standards. For further information we are at your disposal.

# Technical data sheet Merbenit RV30

## 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 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 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.

## Primer

With many materials, good adhesion is achieved without primer. Preliminary tests are recommended. Primers can be used to improve adhesion:

- on porous, absorbent surfaces such as concrete, masonry, plaster: Apply V21 primer with a brush. The use of V21 primer is generally recommended when exposed to water.

- on smooth, non-absorbent surfaces such as plastic, stainless steel, thermal coating: Apply a thin layer of V40 primer with a lint-free cloth. As thermal coatings can vary greatly, the use of V40 primer or preliminary tests are generally recommended.

- on UV-exposed glass: Black Glass primers serve as a protective barrier against the effects of UV radiation.

- In direct contact with bituminous substrates, V17 primer can be used as a barrier layer.

- please observe the drying times and information on the packaging of the respective primers or in the respective technical data sheets at [www.merz-benteli.ch](http://www.merz-benteli.ch) -> Accessories.

Primers are sensitive to moisture. Close the packaging immediately after use and use up as quickly as possible.

Note: primers and thinly applied sealants leave stains that cannot 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.

## Paint compatibility

Due to the wide variety of varnishes and paints on the market, we recommend preliminary tests. Delayed drying may occur with alkyd resin paints. If applied to painted or plastered surfaces, the paint/plaster must be allowed to dry sufficiently (usually 10 days).

Movement-compensating sealants with greater elasticity than paint must not be painted over completely (cracking).

## Chemical resistance

- Good resistance to water, sea water, aliphatic solvents, oils, greases, diluted inorganic acids and alkalis
- Moderate resistance to esters, ketones and aromatic compounds
- Not resistant to concentrated acids and chlorinated hydrocarbons, gasoline, petrol oil

The chemical resistance depends on the exposure time, temperature and concentration of the chemical. Preliminary tests under practical conditions are therefore highly recommended. Our data sheets on chemical resistance contain further information.

## Colours

- concrete grey
- white
- 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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