

## Technical data sheet

Version: 10-2023

### **Tests:**

- · DIN EN ISO 15651-4 PW25HM Ext.-Int.
- $\cdot$  Emicode EC1^{\tiny PLUS}"very low emissions"
- $\cdot$  Fulfils the French VOC requirement Class A+





## **1. Mechanical Properties**

Basis	Hybrid MS polymer sealant
Skin formation time	~ 10 Min. (23°C/50% relative humidity)
Full curing time	~2.5 mm/24 hours (at +23°C/50% relative humidity)
Density	~ 1.48 (EN ISO 1183-1)
Shore A hardness	~ 52 (DIN EN ISO 868)
Volume shrinkage	~ 3.0% (EN ISO 10563)
Tear propagation resistance	~ 20.1 N/mm (ISO 34-1)
Tensile stress at break	~ 1.60 N/mm² (DIN EN ISO 8339)
Module	~ 1.30 N/mm² (EN ISO 8339)
Elongation at break	~ 280% (DIN EN ISO 8339)
Resistance to high and low temperatures	-40°C to +90°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Admissible total deformation	25%
Colours	Concrete grey, other colours available on request
Packaging	600 ml foil bag; other containers on request, industrial containers 20-l drum; 200-l drums
Shelf life of cartridges and foil bags	12 months in original packaging in cool and dry storage conditions
Shelf life of industrial container	6 months, cool and dry in sealed original container

## 2. Properties

316 Bodenfuge is a specially developed, high-modulus 1-component hybrid sealant. The product is free of silicones, isocyanates or other CMR substances. 316 Bodenfuge is UV and weathering resistant, impresses with its very good temperature stability and exhibits virtually no mechanical impairments even when exposed to temperatures of +110°C over a period of 2 months. 316 Bodenfuge impresses with its high motion absorption properties and therefore is ideally suited for applications in both indoor and outdoor areas. The product is characterised by its very good adhesion to concrete substrates, as well as good chemical resistance. 316 Bodenfuge also adheres well to damp surfaces and is therefore highly universal and can be used all year round. 316 Bodenfuge is virtually odourless and meets the strict requirements of EMICODE EC1<sup>PLUS</sup> "very low-emission". During the development of the product, the main focus was placed on resource conservation and sustainability.





#### LASTING BONDS.

Good adhesion without primer

Key +

# Bodenfuge

## 3 Priming table

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3. Priming table		-	No adhesion
		Primer	Recommended primer
Glass	+		
Tiles	+		
Pine wood	+		
Wet ground concrete	+		
Concrete, formwork smoothness	+		
Steel DC 04	+		
Hot-dip galvanised steel	+		
Stainless steel	+		
Zinc	+		
Aluminium	+		
Aluminium AlMg1	+		
Aluminium AlCuMg1	+		
Aluminium 6016	+		
Anodised aluminium	+		
Brass MS 63 Hardness F 37	+		
PVC Kömadur ES	+		
PVC soft	+		
PC Makrolon Makroform 099	-		
Polyacrylic PMMA XT 20070 Röhm*1	+		
Polystyrene PS Iroplast	+		
ABS Metzoplast ABS 7 H	Primer 100		
PET	+		
PU waste quality	+		
Copper	+		
Polycarbonate	+		
PMMA Röhm sanitary quality	+		
Mirrors*2	-		
Natural stone	-		
his table is based on adhesion tests with Rocholl test specimen	s under laboratory conditions. In practice, t	he adhesive pror	erties depend on a large number

This table is based on adhesion tests with Rocholl test specimens under laboratory conditions. In practice, the adhesive properties depend on a large number of external influences (weathering, contamination, loads, etc.). Therefore, this table is for guidance only and does not constitute a binding statement. For further information please contact our application engineering department. The tests carried out above only refer to the adhesive properties and have no significance in terms of compatibility with the stated substrates. \*1: Different PLEXIGLAS® types exhibit certain differences in their chemical resistance. Stresses must be expected in some applications. The resulting stresses, in combination with certain agents, can lead to "stress cracking". The duration, temperature and concentration of the acting substance have a fundamental influence on any "stress cracks". When using our products in combination with PLEXIGLAS®, the suitability must therefore be checked in advance. \*2: The compatibility with various mirror coatings by different manufacturers is regularly tested in our laboratory. Advance testing is recommended due to production processes of the various manufacturers, into which we have no insights, and as a function of the existing substrate and bonding variants.

## 4. Application

This product was specially developed for use in joints that can be walked on or driven over, but is also suitable for versatile applications in onsite substrates with high inherent strength. Due to its high tear propagation resistance, the product is great choice for use in applications where mechanically stressed joints need to be sealed, such as occurring in workshops, warehouses, parking decks, garages, production shop floors or the like. Due to the very low odour formula used for the product, in combination with the low shrinkage, 316 Bodenfuge can also be used to seal parquet, laminate or even plastic flooring.



LASTING BONDS.



316

#### Chemical resistance - tested at 23°C

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Ammonia (10%)	resistant
Calcium hydroxide (saturated)	resistant
Distilled water	resistant
Acetic acid (5%)	resistant
Ethanol (20%)	resistant
Tap water	resistant
Caustic soda (5%)	resistant
NaCl (10%)	resistant
Surface cleaner 502	not resistant
Sulphuric acid (10%)	short-term resistance (24 h)
Hydrogen peroxide (10%)	resistant
White oil	resistant
Citric acid (5%)	short-term resistance (24 h)

The above information is provided for guidance. Depending on the exposure time / temperature / concentration and the application method, the specifications / resistance can vary. In-house test series are recommended.

## 5. Meets the requirements of IVD instruction sheet

No. 1	Sealing of floor joints with elastic sealants
No. 2	Classification of sealants
No. 12	Overpaintability of motion-compensating sealants in building construction. Requirements and impacts.
No. 16	Perimeter joints in dry construction. Possible applications of sprayable sealants
No. 29	Joint work in painting and decorating trade
No. 31	Refurbishment of joint seals in building construction
No. 35	Sealing and bonding in construction - Systems - Classification - Application

## 6. Processing

**General instructions:** The expiry date of the material must be observed, otherwise the stated mechanical properties of the product can no longer be guaranteed. Observe the ambient temperature and substrate temperature. Before applying, it must be ensured that all building materials in the contact area are compatible with the sealant. **Pre-treatment of the adhesion surfaces:** the adhesion surfaces must be load-bearing, dry, and free of dust, grease, and oil. If required, carefully pre-treat the adhesion surfaces using a suitable primer. Substrates containing tar and bitumen are unsuitable as adhesion substrates or must be tested independently in advance. **Joint design:** For motion compensating joints, the dimensions must be designed to absorb the maximum motion expected. The joint cross-section must be planned in advance and adhered to. Joint dimensions that do not comply with the state of the art are impermissible. Back filling must be effected with a suitable PE-based closed-cell profile. **Application of the sealant:** Working within the application temperature limits, the product must be applied uniformly to the joint avoiding inclusions. If the substrate is pretreated with primer, its flash-off time must be observed. When reworking, good contact with the adhesive surfaces/joint edges must be ensured (using Ramsauer tooling agent). The joint must be tooled within the skin formation time. **Rework:** Any contamination caused by the use of tooling agents must be removed and cleaned up immediately. Contamination from adjacent substrates must be cleaned up when fresh, this is also recommended for contaminated processing equipment.



## 7. Application restrictions

**Caution:** The product is not suitable for underwater joints in swimming baths and aquariums. Not suitable for sealing and bonding natural stone (edge zone contamination). For use in conjunction with roofing membranes/foils, please contact our application engineering department. Not approved for bonding mirror elements and/or coated glazing units – independent series of tests are recommended for this application. High-modulus sealants are not suitable for on-site substrates with low inherent strength, e.g., renders, aerated concrete, ETICS, etc.). When coating the sealing compound with alkyd resin paints, incompatibilities may occur (curing problems, sticky surfaces, discolourations, etc.). As a general rule, if the hybrid compound is coated subsequently, its compatibility with the coating or paint system used must be checked. Not suitable for sealing glass rebates. Touch contact with materials containing bitumen and plasticisers, e.g. butyl, tar, asphalt, EPDM, neoprene, insulating paints or bituminous coating, etc., must be investigated in advance. Environmental influences (e.g., high temperature, UV exposure, chemical influences such as vapours, etc.) can permanently affect the product's appearance, but this has no negative effect on the product's mechanical properties. Before applying, the user must ascertain that the building materials (solid, liquid or in gaseous form) are compatible with the sealant in the contact area. High substrate or base temperatures during processing can lead to impairments of the mechanical properties.

## 8. Safety instructions

Please refer to the current EC safety data sheets. Data sheets are available at any time from our website at **www.ramsauer.eu**.

## 9. Application notes

Good ventilation must be ensured during processing and curing. Due to the large number of possible influences during processing and application, the processor must always carry out a test processing before use. Note the expiry date of the material. 1-component sealants are not suitable for full-surface bonding. The curing speed increases with increasing coating thickness. If the 1-component material is used in coating thicknesses of more than 15 mm, please contact our application engineering department. If the products are stored and/or transported over a longer period of time (several weeks) at higher temperatures/humidity, the shelf life may be reduced or the material properties may change.

## 10. Liability for defects

The information, in particular the suggestions for the processing and use of our products, is based on our knowledge and experience in normal use cases at the time of printing. Depending on the specific circumstances, in particular with regard to substrates, processing and environmental conditions, the results may differ from this information. Therefore the guarantee of a work result or a liability, for whatever legal reasons, can be justified neither from these references, nor from a verbal consultation, unless we are guilty of intent or gross negligence in this respect. Ramsauer guarantees that its products comply with the technical properties specified in the technical data sheets until the expiry date. Product users must consult the latest technical data sheet, which can be requested from us. Our current General Terms and Conditions apply, which you can download at any time from our homepage at **www.ramsauer.eu**. On publication of a new version/revision of the technical data sheet, all previous versions of the respective product lose their validity.