



# 450

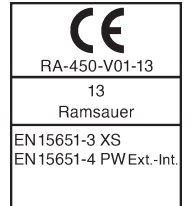
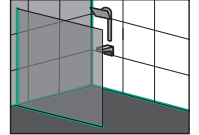
# Sanitär

**1-component acetic cure silicone sealant**



**RAMSAUER®**

**LASTING BONDS.**



## Technical data sheet

Version: 11-2023

### Tests:

- DIN EN ISO 15651-3 XS1
- DIN EN ISO 15651-4 PW20LM Ext.-Int.
- DIN EN ISO 846
- Tested for use in the foodstuffs industry
- Certificate of compatibility for the foodstuff industry
- Tested for use in cleanrooms
- Fulfils the French VOC requirement Class A+
- EMICODE EC1<sup>PLUS</sup> „very low emissions“

## 1. Mechanical Properties

Basis	Acetic silicone sealant
Skin formation time	~ 5 Min. (23°C/50% relative humidity)
Full curing time	~2.3 mm/24 hours (at +23°C/50% relative humidity)
Density	~ 1.00 (EN ISO 1183-1)
Shore A hardness	~ 22 (DIN EN ISO 868)
Volume shrinkage	~ 6.0% (EN ISO 10563)
Tear propagation resistance	~ 6.7 N/mm (ISO 34-1)
Tensile stress at break	~ 0.7 N/mm <sup>2</sup> (DIN EN ISO 8339)
Module	~ 0.44 N/mm <sup>2</sup> (EN ISO 8339)
Elongation at break	~ 180% (DIN EN ISO 8339)
Resistance to high and low temperatures	-50°C to +180°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Admissible total deformation	20%
Colours	As per current colour card
Packaging	310 ml cartridge; 400 & 600 ml foil bag; industrial container 20-l drum; 200-l drums
Shelf life of cartridges and foil bags	24 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

450 Sanitär exhibits best adhesion to all common building materials in the sanitary sector (e.g. anodised aluminium, glazed tiles, glass, tiles, many plastics, porcelain, etc.). 450 Sanitär is characterised in particular by its special viscosity with regard to good processability and optimal smoothability. Ramsauer sanitary silicone contains fungicidal agents that counteract infestation by microorganisms (moulds, bacteria). To support the mould-repellent properties, it is recommended to use cleaning and disinfecting agents to keep the joint surfaces and the adjacent surfaces clean. 450 Sanitär is resistant to commercially available cleaning agents and disinfectants. In vulcanised state, 450 Sanitär is physiologically harmless and inert. The material is resistant to UV, weathering and ageing.



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### 3. Priming table

Key

+	Good adhesion without priming
-	No adhesion
Primer	Recommended primer

	Coloured
Glass	+
Tiles	+
Pine wood	Primer 70
Wet ground concrete	-
Concrete, formwork smoothness	-
Steel DC 04	Primer 140
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	Primer 40
Polystyrene PS Iroplast	-
ABS Metzoplast ABS 7 H	Primer 100 / Primer 105
PET	+
PU waste quality	+
Copper	-
Polycarbonate	-
PMMA Röhm sanitary quality	Primer 40
Mirrors*2	-
Natural stone	-

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

450 Sanitär is recommended for jointing work in wet and damp areas, for sealing perimeter and expansion joints that are exposed to high humidity, e.g. in sanitary areas, bathrooms and kitchens, for perimeter joints in bathtubs and shower trays, washbasins and shower partitions as well as for ceramic wall and floor coverings. For applications with laminated glass and/or insulating glass units, please consult our application engineering department. Suitable for use / seals in the foodstuff industry, restaurants, catering, etc.



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## 5. Meets the requirements of IVD instruction sheet

No. 3-1	Construction and sealing of joints in sanitary and wet areas - Part 1: Sealing of sprayable sealants
No. 14	Sealants and mould infestation

## 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. **Pretreatment of the adhesion surfaces:** The adhesion surfaces must be load-bearing, dry, and free of dust, grease, and oil. If required, carefully pretreat the adhesion surfaces using a suitable primer. **Joint design:** For motion compensating joints, the dimensions must be designed to absorb the maximum motion expected. A minimum cross-section of 3x5 mm must be adhered to for the joint. The joint design must comply with the applicable standards and regulations. **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. The tooling work must be completed within the stated skin formation time. When reworking, good contact with the adhesive surfaces/joint edges must be ensured (use Ramsauer tooling agent). When using tooling agents, any water streaks that have formed must be removed immediately after sealing, as visual flaws can otherwise be expected.

## 7. Application restrictions

**Caution:** 450 Sanitär is not suitable for underwater joints in swimming baths and aquariums. Not suitable for grouting and bonding natural stone (edge zone contamination). Not suitable for bonding mirrors. When used with metals, especially brass, copper, lead, zinc, etc., the acetic acid released during curing may cause corrosion. Substrates containing tar and bitumen are unsuitable as adhesion substrates. Not suitable for large-surface bonding. Before using the sealant, the user must rule out incompatibilities with other building materials in the contact area. Please clarify in advance, for building materials that will subsequently be applied in the area of the adhesive/sealant, that their ingredients or cleavage products of these materials cannot impair, or change the properties of, the sealant.

## 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](http://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. When renovating mould-infested joints, the infested sealant must be removed completely and the affected areas must be treated with 503 Schimmelspray, otherwise mould can reappear very quickly.



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## **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.

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