



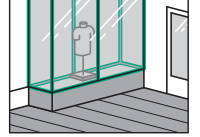
**RAMSAUER®**

# 470

**LASTING BONDS.**

# Vitrine

**1-component acetic cure silicone sealant**



## Technical data sheet

Version: 12-2023

### Tests:

- Fulfils the French VOC requirement Class A+
- Nearly crystal clear after curing



## 1. Mechanical Properties

Basis	Acetic silicone sealant
Skin formation time	~ 5 Min. (23°C/50% relative humidity)
Full curing time	~2.1 mm/24 hours (at +23°C/50% relative humidity)
Density	~ 0.988 (EN ISO 1183-1)
Shore A hardness	~ 21 (DIN EN ISO 868)
Volume shrinkage	~ 7.2% (EN ISO 10563)
Tear propagation resistance	~ 7.0 N/mm (ISO 34-1)
Tensile stress at break	~ 0.55 N/mm <sup>2</sup> (DIN EN ISO 8339)
Module	~ 0.44 N/mm <sup>2</sup> (EN ISO 8339)
Elongation at break	~ 150% (DIN EN ISO 8339)
Resistance to high and low temperatures	-50°C to +150°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Admissible total deformation	15%
Colours	Crystal-clear
Packaging	310 ml cartridge, other containers on request
Shelf life of cartridges and foil bags	18 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

After curing, 470 Vitrine offers very good ageing and weathering resistance. The transparency of the cured material is very close to that of glass. Resistant to short-term exposure to dilute alkalis or acids. Good adhesion to glass, glass-like surfaces and anodised aluminium, even without using a primer. Using a primer improves adhesion on plastics, stainless steel and other metals.



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Key

+	Good adhesion without priming
-	No adhesion
Primer	Recommended primer

### 3. Priming table

Glass	+
Tiles	+
Pine wood	-
Wet ground concrete	-
Concrete, formwork smoothness	-
Steel DC 04	Primer 140 / Primer 145
Hot-dip galvanised steel	-
Stainless steel	-
Zinc	-
Aluminium	Primer 40
Aluminium AlMg1	Primer 40
Aluminium AlCuMg1	Primer 40
Aluminium 6016	Primer 40
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 / Primer 105
PET	-
PU waste quality	+
Copper	-
Polycarbonate	-
PMMA Röhm sanitary quality	-
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

Due to the great transparency, seals and bonds with 470 Vitrine are unobtrusive in glass, shop window, and display case construction work. Not suitable for use with laminated glass units or insulating glazing.



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## 5. Meets the requirements of IVD instruction sheet

not applicable

## 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. **IMPORTANT:** 470 Vitrine must be reworked when dry, otherwise the transparency may be affected.

## 7. Application restrictions

**Caution:** When used with metals, especially brass, copper, lead, zinc, etc., the acetic acid released during curing may cause corrosion. Before applying the product to substrates (surfaces) that have been pretreated with water-soluble paint systems, it is important to carry out bonding tests. If the bond is poor, the substrate must be primed with a primer coat. A further bonding test is recommended. Not suitable for substrates with an alkaline reaction. Substrates containing tar and bitumen are unsuitable as adhesion substrates. Not suitable for bonding mirrors, natural stone, and aquarium and terrarium construction. 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. Adhesion is not possible on PTFE (Teflon), polyethylene, polyurethane foam and silicone. Not suitable for use with laminated glass units. The transparency can vary depending on the layer thickness.

## 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.

## 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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