



# 670

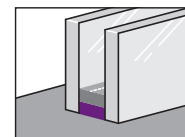


**RAMSAUER®**

**LASTING BONDS.**

## 2-Komponenten Kleber

**2-component silicone-based adhesive**



## Technical data sheet

Version: 09-2024

### Tests:

- Tested in accordance with DIN EN 1279-2
- Tested in accordance with DIN EN 1279-3
- Tested in accordance with DIN EN 1279-4
- Tested in accordance with OECD guideline 236
- Tested for break-in-resistant RC2 and RC3 bonding

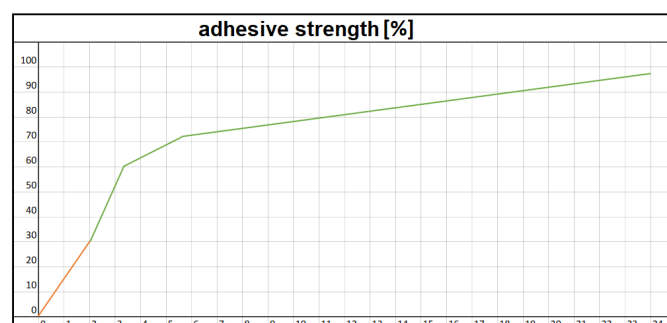
### 1. Technical data

Basis	Neutrally curing - alkoxy system
Shore hardness	~ 45 (DIN 53505)
Modulus of elasticity 100 %	~ 1,1 N/mm <sup>2</sup> (DIN 53504-1 (S2))
Elongation at break	~ 250% (DIN 53504-1 (S2))
Tear propagation resistance	~ 9.9 N/mm <sup>2</sup> (ISO 34 Method C)
Tensile strength at +23 °C	~ 2,1 N/mm <sup>2</sup> (DIN 53504-1 (S2))
Shear strength	~ 1.4 N/mm <sup>2</sup> (DIN 52455-3)
Density comp. A (mass) / comp. B (curing agent) / mixture	~ 1.31 / 1.05 / 1.29 g/cm <sup>3</sup>
Resistance to high and low temperatures	-50°C to +150°C (long-term exposure)
Application temperature (substrate, environment)	+5°C to +35°C
Pot life	Approx. 35 minutes
Max. movement accommodation	25%
Shelf life: Coaxial cartridge 280 ml side-by-side cartridge 490 ml 20 l drum, 200l barrels	6 months cool and dry storage conditions in original packaging
Colours	Black
Packaging	Cartridges of 280 ml, 490 ml, side-by-side cartridge, 20 l drum, and 200 l barrels

### 2. Properties / application

The 670 2-Komponenten Kleber is a moisture-independent silicone rubber specially designed for bonding and sealing a wide range of materials. The Kleber is a great choice for surface bonding where the access of atmospheric moisture is blocked. It is characterised by excellent adhesion to glass and is therefore ideal for the UV-resistant bonding of insulating glass panes, as well as for sealing single-pane, insulating and laminated glass in wooden and metal frames, and for sealing frame constructions, display cases, aquariums and terrariums. The 670 2-Komponenten-Kleber is also ideal for automotive and shipbuilding, as well as for bonding ceramic hobs, iron structures, tanks and a wide range of industrial applications. It is resistant to ageing, weathering and UV radiation, and after curing is odourless, physiologically harmless and inert.

The bond is moderately loadable after a curing time of approx. 2 hours. The maximum adhesive strength will be reached after approximately 24 hours. Suitable for use in break-in-resistant RC2 and RC3 bonding. Compatible with the most common insulating glass edge seal systems





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### 3. Substrate pre-treatment

The adhesion surfaces must be dry, capable of bearing, and free of dust, oil and grease. Pre-cleaning with 828 Grundreiniger is generally recommended on non-absorbent substrates, but compatibility with sensitive surfaces should be checked in advance to avoid surface damage. If required, carefully pretreat the adhesion surfaces using a suitable primer. Sanding with a fine sanding fleece can further improve adhesion on smooth surfaces. Due to the many different coating systems, an adhesion test is recommended before application to painted surfaces.

Substrate	Pre-treatment
Glass	828 Grundreiniger
Tiles	828 Grundreiniger
Pine wood	Dust free
Wet ground concrete	Dust free
Concrete, formwork smoothness	Dust free
Bare steel	828 Grundreiniger
Galvanised steel	828 Grundreiniger
Stainless steel	828 Grundreiniger
Zinc	828 Grundreiniger
Copper	828 Grundreiniger
Aluminium	828 Grundreiniger
Aluminium AlMg1	828 Grundreiniger
Aluminium AlCuMg1	828 Grundreiniger
Aluminium 6016	828 Grundreiniger
Anodised aluminium	828 Grundreiniger
Brass MS 63 Hardness F 37	828 Grundreiniger
PVC Kömadur ES	Primer 100
PVC soft	Primer 100
Polystyrene PS Iroplast	Primer 100
ABS Metzoplast ABS 7 H	Primer 100
PET	Primer 100
PU waste quality	Primer 100
PC Makrolon Makroform 099	828 Grundreiniger
PMMA Röhm sanitary quality	Primer 100
Polyacrylic PMMA XT 20070 Röhm*1	Primer 40
GRP	828 Grundreiniger
EPDM Semperit E 9614	Primer 100

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.



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### 4. 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. If the products are stored and/or transported over a longer period of time at higher temperatures/humidity, the shelf life may be reduced or the material properties may change. Strong environmental influences (e.g. high temperature, UV exposure, chemical influences such as vapours) can affect the properties of the material to varying degrees. 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. Pay attention to the ambient and substrate temperature during application because as excessively high or low temperatures can lead to changes in properties. Due to the large number of possible influences during processing, it is always advisable for the processor to carry out a test processing before use. Good ventilation must be ensured during processing and curing.

**Pre-treatment of the adhesion surfaces:** The substrate must be pretreated in accordance with the instructions in section 3 of this technical data sheet.

**Recommended processing equipment:**

- 280ml cartridge: RH9 manual sealant gun or RM5 Power pneumatic sealant gun
- 490ml side-by-side cartridge: RM49 pneumatic sealant gun

**Caution:** Perform the first pressing-out process without the static mixer screwed on. The static mixer is not placed on top until both components are visible. Discard the start of the mixed bead (approx. 5cm, the components are not yet 100% mixed). Ensure constant, correct mixing. For machine processing, stir component B in advance. When mixing with a 2-component dosing and mixing unit, dosing is at a mixing ratio of 10:1 (by volume) or 12:1 (by weight).

Component A does not react with humidity in the atmosphere and is stable under normal conditions (23°C/50%RH).

Component B is sensitive to humidity in the atmosphere and must be protected against moisture.

**Applying the material:** Apply the 670 2-Komponenten Kleber evenly and free of bubbles into the adhesive joint or onto the bonding surface while observing the processing conditions. If the substrate is pretreated with primer, its flash-off time must be observed. It is essential to ensure perfect contact with the adhesive surfaces or edges.

**Post-treatment:** Remove protruding material using a suitable tool (e.g. plastic spatula, cutter knife). Do not treat with tooling agent because this can lead to surface defects.

### 5. Meets the requirements of IVD instruction sheet

No. 22	Perimeter joints in structural steel and aluminium facades and structural glazing. Possible applications of sprayable sealants
No. 30	Assembly adhesive for bonding and sealing

### 6. Maintenance and care

Ramsauer sealants and adhesives are carefully manufactured using state-of-the-art production processes. This results in high-quality products which, when processed appropriately, enable durable and resistant bonding and jointing. However, in order to guarantee the functionality of the joints and bondings, they need to be checked at regular intervals in accordance with the loads they are exposed to (chemical, mechanical, thermal, UV radiation), to clean them and to renew them if necessary (also see information sheet "Care and maintenance of joint seals").

### 7. Application restrictions

- Not suitable for structural bonding of structural glazing elements.
- No adhesion is possible on plastics with a low-energy surface, such as PE, PP or PTFE
- Not suitable for natural stone applications
- Not suitable for mirror bonding



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### 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. 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, with regard to the substrate, processing and environmental conditions, the results may differ from our information. No warranty or liability claim for any reason whatsoever arises from these instructions or from any instructions issued verbally. 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; you can download these at any time from our homepage at **[www.ramsauer.eu](http://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.