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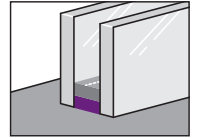


RAMSAUER®

LASTING BONDS.

2-Komponenten Kleber

2-component silicone-based adhesive



Technical data sheet

Version: 03-2024

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. Mechanical Properties

Basis	Neutrally curing - alkoxy system
Shore hardness	~ 35 (DIN 53505)
Modulus of elasticity 100 %	~ 0.5 N/mm ² (DIN 53504)
Elongation at break	~ 200 % (DIN 53504)
Tear propagation resistance	~ 7.5 N/mm ² (ISO 34 Method C)
Tensile strength at +23 °C	~ 0.95 N/mm ² (ISO 8339 Method A)
Shear strength	~ 1.4 N/mm ² (DIN 52455-3)
Cartridge density	~ 1.29 g/cm ³
Density comp. A (mass)	~ 1.31 g/cm ³
Density comp. B (curing agent)	~ 1.05 g/cm ³
Resistance to high and low temperatures	-50°C to +150°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Pot life	Approx. 45 minutes
Permissible joint movement	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

670 2-Komponenten Kleber is a fast-curing, moisture-independent silicone rubber specially designed for bonding and sealing a wide range of materials. 670 2-Komponenten Kleber is characterised by excellent adhesion to glass. A primer is required for absorbent surfaces (such as woods, plasters, concrete, etc.) and for plastics and metallic substrates. Resistant to ageing, weathering and UV. Suitable for laminated glass. Suitable for spacers made of aluminium, stainless steel and plastic. After complete curing, the material is odourless, physiologically harmless and inert.



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3. Priming table

Key

+	Good adhesion without priming
-	No adhesion
Primer	Recommended primer

Glass	+
Tiles	+
Pine wood	+
Wet ground concrete	Primer 160
Concrete, formwork smoothness	Primer 160
Steel DC 04	Primer 140 / Primer 145
Hot-dip galvanised steel	Primer 140 / Primer 145
Stainless steel	+
Zinc	Primer 140 / Primer 145
Aluminium	+
Aluminium AlMg1	Primer 140 / Primer 145
Aluminium AlCuMg1	Primer 140 / Primer 145
Aluminium 6016	Primer 140 / Primer 145
Anodised aluminium	+
Brass MS 63 Hardness F 37	+
PVC Kömadur ES	Primer 100 / Primer 105
PVC soft	Primer 100 / Primer 105
PC Makrolon Makroform 099	-
Polyacrylic PMMA XT 20070 Röhm*1	-
Polystyrene PS Iroplast	Primer 100 / Primer 105
ABS Metzoplast ABS 7 H	Primer 100 / Primer 105
PET	Primer 100 / Primer 105
PU waste quality	Primer 100 / Primer 105
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

670 2-Komponenten Kleber is a great choice for bonding substrates (surface bonding) where the access of atmospheric moisture is blocked. Especially suitable for UV-resistant bonding of insulating glass panes. For sealing reinforced and insulating glazing (also in combination with PVB-film for laminated glass panes) in wooden and metal frames, and for sealing frame constructions, showcases, aquariums, terrariums, automotive, ship building, bonding of ceramic hobs, iron constructions, tanks and a variety of industrial applications. Suitable for use in break-in-resistant RC2 and RC3 bonding. In applications with insulating glazing, compatibility with the edge sealant system in use must be clarified in advance.



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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. 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 and grease. Carefully prime the adhesion surfaces. Substrates containing tar and bitumen are unsuitable as adhesion substrates.

Processing: When processing the 280 ml cartridge, the best results are achieved with the RH9 manual gun or the RM5 Power pneumatic sealant gun. Use the RM49 pneumatic sealant gun for the 490 ml side-by-side cartridge. Mix via the forced mixer supplied with the product (mixers can also be ordered separately).

IMPORTANT: Discard approx. 15 cm of the bead (the components are not yet 100 % mixed).

Mixing with a 2-component dosing and mixing unit; dosing is at a mixing ratio of 10 : 1 (by volume), 12 : 1 (by weight).

Application of the material: Working within the application temperature limits, 670 2-Komponenten Kleber 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 (use Ramsauer tooling agent). When using tooling agents, any water streaks that have formed must be removed immediately after sealing. If cleaning takes place later, permanent striations may remain.

IMPORTANT: For machine processing, stir component B in advance.

7. Application restrictions

Caution: Not suitable for structural bonding of structural glazing elements. Before application, the processor must ensure that all building materials (solid, liquid or gaseous) coming into contact with the material are compatible and do not damage or modify the material.

Paints, lacquers, plastics or other coating materials must be compatible with the adhesive/sealant. The condition for chemical resistance to PVB films is a flawless bond between the PVB film and the glass. Since PVB films are sensitive to water, the edge of the laminated safety glass pane must be correctly implemented to protect the PVB film against water ingress.

For grouting, sealing or bonding in underwater areas, as well as in aquarium construction, a curing time of at least 7 days must be observed before initial filling or loading with water. Please contact our application engineering department for applications in the large-scale aquarium sector or similar.

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.

Occupational health and safety: Avoid swallowing, prolonged or repeated contact with the skin. Keep out of the reach of children. Request a safety data sheet!



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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.

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.

Ensure constant, correct mixing. To this end, the recommendation is to create a specimen before processing and compare this with a reference sample. The products must be stored in the original containers. If the products are stored and/or transported at elevated temperature/humidity, a reduction of the shelf life or impairment of the material properties cannot be ruled out.

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, 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.

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