

Technical data sheet

Version: 11-2023

Tests:

 \cdot Fulfils the French VOC requirement Class A+





<u>1. Mechanical Properties</u>

Basis	Neutral cure alkoxy silicone sealant
Skin formation time	~ 10 Min. (23°C/50% relative humidity)
Full curing time	~2.9 mm/24 hours (at +23°C/50% relative humidity)
Density	~ 1.03 (EN ISO 1183-1)
Shore A hardness	~ 17 (DIN EN ISO 868)
Volume shrinkage	~ 4.3% (EN ISO 10563)
Tear propagation resistance	~ 5.5 N/mm (ISO 34-1)
Tensile stress at break	~ 0.61 N/mm² (DIN EN ISO 8339)
Module	~ 0.37 N/mm² (EN ISO 8339)
Elongation at break	~ 280% (DIN EN ISO 8339)
Resistance to high and low temperatures	-40°C to +150°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Admissible total deformation	25%
Colours	Grey, black, dark brown, transparent
Packaging	310 ml cartridge, other containers on request
Shelf life of cartridges and foil bags	10 months in original packaging in cool and dry storage conditions

2. Properties

460 Dach + Solar is an alkoxy silicone rubber specially designed for plumbing work, as very good adhesion to almost all substrates encountered in this trade can be achieved without a primer.



Dach + Solar Key

Good adhesion without priming No adhesion 3. Priming table Primer Recommended primer Glass + Tiles + Pine wood + Wet ground concrete Primer 70 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 Primer 100 ABS Metzoplast ABS 7 H + 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

*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 with 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

460 Dach + Solar is particularly suitable for sealing expansion and butt joints, bonding, solar work as well as house connections with floor slabs as typically reoccurring in plumbing work. Due to its UV resistance, it is also particularly suitable for solar glazing.



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. Before applying, it must be ensured that all building materials in the contact area are compatible with the sealant. **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. Use our 400 Acrylglas (stress cracks) product for extruded polyacrylates, such as light domes. **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: Heavy exposure to tobacco smoke or environmental influences can lead to discolouration. The product is not suitable for grouting natural stone. Not suitable for aquarium construction and drinking water applications. Avoid contact with materials containing tar, bitumen and plasticisers.

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.

<u>10. Liability for defects</u>

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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