

460 Dach + Solar

Neutral cure silicone



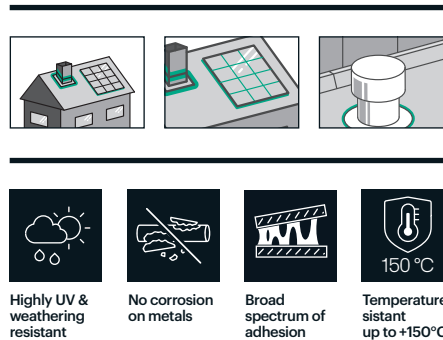
Technical data sheet

Version: 09-2025



Tests:

- Emission EC1 "very low emissions"
- Fulfills the French VOC requirement Class A+



1. Technical data

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/mm ² (DIN EN ISO 8339)
Module	~ 0,37 N/mm ² (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, 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 / applications

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. 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.

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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.

Substrate*	Pre-treatment
Glass	828 Grundreiniger
Tiles	828 Grundreiniger
Pine wood	Dust free / Primer 70
Wet ground concrete	Dust free / Primer 70
Concrete, formwork smoothness	Dust free / Primer 70
Steel DC 04	828 Grundreiniger
Hot-dip galvanised steel	828 Grundreiniger
Stainless steel	828 Grundreiniger
Zinc	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	828 Grundreiniger
PVC soft	828 Grundreiniger
PC Makrolon Makroform 099	828 Grundreiniger
Polyacrylic PMMA XT 20070 Röhm* ¹	828 Grundreiniger
Polystyrene PS Iroplast	Primer 100
ABS Metzoplast ABS 7 H	828 Grundreiniger
PET	828 Grundreiniger
PU waste quality	828 Grundreiniger
Copper	828 Grundreiniger
PMMA Röhm sanitary quality	828 Grundreiniger
Mirrors* ²	828 Grundreiniger
GRP	828 Grundreiniger
EPDM Semperit E 9614	828 Grundreiniger

***For substrates which are not listed in this table, the processor must always carry out preliminary tests to check the suitability of the sealant for use. The tests carried out above only refer to the adhesive properties and have no significance in terms of compatibility with the stated substrates.**

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, etc.). Therefore, this table is for guidance only and does not constitute a binding statement.

*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. Application notes/restrictions

- Not suitable for jointing or bonding natural stone.
- Single-component materials are not suitable for large-surface adhesive bonding or joints above 15 mm. Using the single-component material in layer thicknesses of more than 10 mm, the curing speed is reduced considerably in some cases.
- Heavy exposure to tobacco smoke or environmental factors can lead to discoloration.
- Avoid contact with materials containing bitumen and plasticisers, e.g. butyl, EPDM, neoprene, insulating paints or bituminous coating, etc.
- Without pre-treatment, no adhesion is possible on plastics with a low-energy surface, such as PE, PP or PTFE
- Not suitable for aquarium construction or potable water applications.

5. Processing

General instructions: The expiry date of the material must be observed, otherwise the 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.

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. To avoid 3-edge adhesion, backfill with a suitable material if necessary (preferably Ramsauer 1050 round profile closed-cell)

Application of the sealant: 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).

Post-treatment: Once the joint has been formed, any residue of tooling agent must be removed before it dries, otherwise visual flaws are to be expected.

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. Meets the requirements of IVD instruction sheet

not applicable

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. 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, no guarantee can be provided for the quality of the results achieved, which are influenced by the aforementioned circumstances. No legal claim, in whatever form, can be asserted against Ramsauer GmbH & Co KG based on these reference or from a verbal consultation, unless we are guilty of intent or gross negligence in this respect. Ramsauer GmbH & Co KG 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, which you can download at any time from our homepage at 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.

