

KLEIBERIT 590 E

Ready-to-use, permanently elastic, acetic-acid curing, silicone-based sealant for indoor and outdoor use with maximum movement accommodation of 25%.

Acetate system

Fields of application

- Sealing joints and connecting joints in sanitary areas, glass and window construction and in metal construction.
- KLEIBERIT 590 E is **not suitable** for aquarium construction, for use on marble/natural stone, bitumen substrates, untreated (non-primed) metallic substrates, untreated (non-primed) absorbent substrates as well as in areas with direct contact to food.
- Not EPDM suitable.
- **Not suitable** for use on plastics (e.g. PE, PP, and PTFE) on which silicone generally has bad adhesion as well as for surface bonding.
- **Not suitable** for use on treated glass, special metal-reinforced glass or laminated safety glass.

Advantages

- Good adhesion to glass, ceramics, enamel*.
- Permanently elastic
- Good resistance to water and weather
- Resistant to extremes of heat and cold
- Excellent ageing resistance
- Good UV resistance
- Fire Classification (EN 13501) – Class E

***For painted wood, we recommend the use of KLEIBERIT 594 N.**

Properties of KLEIBERIT 590 E

Base: Acetic-acid curing silicone rubber
Specific weight: $0.96 \pm 0.04 \text{ g/cm}^3$
Consistency: Pasty, stable

Colors: 590.0 - transparent
 590.1 - white

Processing temperature
(sealant and surface): +5°C to +35°C

Yield:

Joint meter per 310 ml cartridge at following joint dimensions:

5 x 5 mm	approx. 12 m
10 x 10 mm	approx. 3 m

Skinning time: approx. 15 min
 (20°C/50 % rel. air humidity)

Curing rate: approx. 2.5 mm in the first 24 hours
 (20°C/50 % relative air humidity)

Shore A Hardness
(DIN 53 505): 15 ± 5

Permissible total deformation
(DIN EN ISO 10563): approx. 25 %

Temperature resistance:
 -40°C to +150 °C

Identification: Not required according to EU regulations
 (see our safety data sheet).

Application techniques

Pretreatment:

The substrates to be bonded must be solid, dry, clean and free of any dust or grease (clean if needed).

For renovation work, the old sealing compound as well as paint residue and layers which are not firm must be completely removed. Conduct preliminary testing on coated surfaces (e.g. painted) to ensure compatibility with the sealant.

The joint must have suitable, properly sized back filler (e.g. PE round cord, PE foil) to avoid three-sided adhesion.

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To avoid contamination and to achieve an exact joint, the edges of the joint can be covered with tape before primer application and sealing.

Joint dimensions:

Joints to be sealed should at least have the following dimensions: 5 x 5 mm (interior applications) and 10 x 8 mm (exterior applications; wide x depth)

Processing:

Cut nozzle according to the joint dimension. Apply sealant without bubbles with suitable hand, battery or air pressure pistol and immediately smooth with water or a neutral, non coloring, smoothing agent and a suitable smoothing tool.

Afterwards immediately remove surplus smoothing agent to avoid permanent streaking.

Sealant remnants can be disposed of in household/commercial waste.

Important:

The acetic acid released during curing can cause corrosion on sensitive metals (e.g. copper, brass, zinc, lead, iron). Loss of adhesion and efflorescence can occur on alkaline substrates (e.g. concrete, mortar).

We recommend the use of neutral cross linking silicones (KLEIBERIT 594 N) on these substrates.

Contact to bitumen or tar containing substrates or substrates giving off plasticizers can result in loss of adhesion or discoloration.

The sealant may not be painted over. Compatibility with nearby coatings must be tested by the user beforehand.

During processing and curing, ensure unrestricted ventilation of emissions given off due to curing process.

Low temperatures and/or joints with a depth of more than 15 mm can considerably slow down curing.

Packaging

KLEIBERIT 590 E:

Carton with 25 plastic cartridges containing 310 ml each

Storage

KLEIBERIT 590 E can be stored in the original factory-sealed containers at +5°C to +35°C and 50% relative humidity for a maximum of 18 months.

Version 24.09.2025 al: replaces previous versions

Waste Disposal

Disposal of contents and/or containers should comply with all applicable federal, state and local regulations.
Our containers are made of recyclable material.

Service

Our application department may be consulted at any time without obligation. The statements made herein are based on our experience gained to date. They are to be considered as information without obligation. Please test and establish for yourself the suitability of our products for your particular purposes. No liability exceeding the value of our product can be derived from the foregoing statements. This also applies to the technical consultancy service which is rendered free of charge and without obligation.