

PRODUCT DATA SHEET

Casco[®] Glass Silicone

Highly elastic waterproof acid curing low modulus sealant with good adhesion to glass, ceramic tiles and aluminium



DESCRIPTION

Casco[®] Glass Silicone is a highly elastic waterproof acid curing low modulus sealant with good adhesion to glass, ceramic tiles and aluminium.

USES

Casco[®] Glass Silicone is intended for glazing and joint sealing of supported window structures, also recommended for mounting and sealing of aquariums. For sealing and bonding in- and outdoor.

CHARACTERISTICS / ADVANTAGES

- Perfect adhesive for silicone sealing strips
- Heat resistance up to +180 °C
- Very good UV resistance
- Has excellent outdoor weather, UV, and water resistance
- Low shrinkage on curing

APPROVALS / CERTIFICATES

EN 15651-1; 2012, F EXT-INT CC
EN 15651-2; 2012, G CC
Class 25 LM

Casco[®] Glass Silicone is MTK-approved (tested for glazing montage of insulating glass windows by the Swedish Institute for approval of glazing products). For structural glazing we strongly recommend contacting companies with professional competence.

PRODUCT INFORMATION

Composition	Basis: Acetoxy silicone Solvent: None
Packaging	300 ml
Shelf life	24 months if stored in moisture tight cartridge
Storage conditions	May not be exposed to temperature below +10 °C or above +30 °C
Colour	Transparent
Density	~1020 kg/m ³ ISO 1183-1 A
Consistency	Gun-grade thixotropic

TECHNICAL INFORMATION

Shore A hardness	~20	ISO 868
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Tensile strength	0,60 MPa	ISO 8339
Modulus of elasticity in tension	100 % Module according to ISO 8339: 0.35 MPa	
Elongation	250 %	ISO 8339
Movement capability	25 %	ISO 11600
Elastic recovery	~98 %	
Tear strength	4.2 N/mm	(SISO 34 method C)
Shrinkage	Volume shrinkage: 3,5 %	
Service temperature	-40 °C to +180 °C	
Joint width	5-30 mm	

APPLICATION INFORMATION

Ambient air temperature	+5 °C - +40 °C
Relative air humidity	Minimum 30 % RH
Curing time	Curing time: ~2 mm the first 24 hours and 10 mm after 7 days, depending on joint-width, temperature, and humidity. Curing system: A small amount of acetic acid is released during the vulcanization, which is catalyzed by moisture in the air.
Skinning time	15-25 minutes (23°C/50%RH)

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS OF USE

- Not paintable
- Glass Silicone will react by solvents; especially aromatics like toluene will cause swelling and deterioration of the sealant.
- Also, petrol and diesel oil have this effect.
- Strong acids and bases will destroy the sealant.
- Due to the risk of dirt picking up around the joint must not be used to seal connecting and expansion joints between non-porous siliceous materials such as tiles or ceramics in facades.
- Also, on porous natural stones like marble and granite Glass Silicone must not be used due to plasticizer migration which will discolour the stones.
- Glass Silicone shall not be used in contact with metals such as lead, copper, brass, or zinc due to corrosion.
- Glass Silicone may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene.
- Greasy plastics like polyethylene, PE and polypropylene as well as Teflon cannot be glued.
- When mounting and sealing of aquariums. NOTE! We do not advise using this product for mounting large aquariums without frames over 200 liters.

FURTHER INFORMATION

Keep out of reach of children.
Do not empty into drains.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

TOOLING

Immediately after application the compound is pressed into good contact with the sides to ensure complete wetting of the bonding surfaces. Smooth the sealant with a trowel or a smooth, moist tooling stick

MAINTENANCE

If the joint has been discolored or a mildew attack has occurred, it might be necessary to clean the joint by using a detergent e.g. Chlorine or with a mildew cleaner.

If the sealant is damaged but the bond is intact, cut out the damage area and re-caulk.

EQUIPMENT

Tools: Sealant gun
Tooling agent: Water with a small amount of soap/detergent

SUBSTRATE PREPARATION

Joint interface must be clean, dry and free from oils, loose aggregates, laitance, release agents, waterproofing and other contaminants.

A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to expose clean, sound surfaces. Apply a joint backing rod of foamed polyethylene that is approx. 25 % wider than the joint. If the available space does not allow a backing rod, prevent adhesion to the bottom of the joint by other means, e.g. with polyethylene tape.

APPLICATION

After the joint is properly prepared, apply the sealant using a caulking gun. Cut the nozzle at an angle and less than the width of the seam. Material must be pressed firmly into the joint to assure complete wetting of the bonding surface. Immediately after application tooling is recommended to ensure firm, full contact with joint sides. The surface can be smoothed with a wet sealant tooling stick or/and sponge. Take care not to contaminate open joints with water. Use pure water or water with a small amount of soap/detergent. Too much soap can affect the tack free time.

DIRECTIONS FOR USE

Both curing and adhesion is dependent on enough moisture. If Glass Silicone is applied under dry conditions or between watertight materials, extra time or moisture might be necessary to obtain optimum cure and adhesion. See below table for recommendation of pre-treatment on different materials.

METAL	The adhesion is good to unionized and lacquered aluminium and stainless steel. Iron and galvanized steel should be primed and/or painted before sealing.
WOOD	Lacquering or painting before sealing is recommended.
GLASS	Glass Silicone bonds perfectly to glass. Always clean the glass by wiping with ethanol or acetone (avoid contact with coatings e.g. with window frames)
PLASTICS	Construction Silicone and Sanitary Silicone are recommended for their general better adhesion to plastics. The adhesion to hard PVC, plasticized PVCx, polystyrene, ABS, polycarbonate, polyacrylatex, and epoxy is good.
POROUS	On porous material like concrete and fresh bricks it is recommended to always use a primer.

It is recommended to do pre-tests.

CLEANING OF EQUIPMENT

Remove all excess sealant adjacent to joint and on equipment prior to cure with a rag. White spirit or technical ethanol is used if necessary. Seal Remover 3987 is recommended if the sealant has cured, otherwise cured sealant is removed mechanically. On skin, uncured sealant is wiped off with a rag, then wash with soap and water.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Casco products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika re-

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serves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or on the website www.casco.eu.

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