Technical Data Sheet

Silicone A 3354.1

Product description Elastic single-component silicone sealant for indoor and outdoor use, with 25% maximum movement tolerance

Curing system Acetate-based curing

Special properties

- elastic silicone-based sealant
- weather-resistant, good UV resistance
- ageing-resistant
- very good adhesion on glass and glazed surfaces (eg enamel, tiles) and anodized aluminum
- compatible with various paints
- with fungicide

Fields of application

For sealing joints and connecting joints in glass, window and metal construction, and in the sanitary sector.

Silicone A 3354.1 must not be must not be used in aquarium construction, as mirror adhesive, on marble/natural stone and in areas with direct food contact. In contact with bituminous, tar or plasticizer releasing substrates (eg EPDM, neopren, butyl) loss of adhesion or discolouration may occur.

For underwater joints, especially thorough application is necessary (primer often required). Underwater joints normally have to be inspected in regular intervals and to be renovated if necessary.

Not suitable for metals sensitive to acetic acid (eg copper. zinc coated metals and others), we recommend to use a neutral curing silicone on these substrates.

On alkaline substrates (eg concrete, plaster), loss of adhesion and blooming may occur due to reaction of acetic acid with the substrate. Not suitable for certain plastics, where silicones in general have low adhesion (eg PE, PP, PTFE).

Yield

Meters of joint per 310 ml cartridge for the following joint dimensions:

5 x 5 mm .....approx. 12.0 m
10 x 10 mm .....approx. 3.0 m

Colours and packaging

- Standard colours: transparent, white (other colours available on request)
- Packaging: 310 / 380 ml cartridges; 400 ml and 600 ml film bags; other package sizes available on request

Usage instructions

Substrate pretreatment

The substrate must be dry, firm, and free of dust and grease (clean with isopropanol, if necessary). Porous substrates (e.g. concrete, plasterboard and untreated wood) must be primed. Before primer application, remove any cement slurry, mold release agents or impregnations. In renovation projects, old sealant, remains of paint and loose material must be fully removed.

The joint must always be provided with a suitable, correctly dimensioned joint backing (e.g. PE cord, rock wool) to prevent adhesion on three faces. To avoid contamination and to achieve a precise joint, we recommend masking the joint edges with adhesive tape before primer application and filling.

Joint dimensions

Joint dimensions should be at least 5 x 5 mm for indoor and 10 x 8 mm (width x depth) for outdoor applications. With increasing joint width (up to 30 mm), joint depth should be roughly half the joint width. Make sure that triangular bevels have uniform sides of equal length with at least 7 mm bonding surface on each side.

Application

After applying the sealant with a suitable manual, battery-powered or pneumatic caulking gun, the sealant can be smoothed in the joint with water or with a neutral, non-staining water-based smoothing agent and a suitable tool (e.g. jointing trowel). Smoothing is not only recommended for optical reasons, but also guarantees close contact and good adhesion to the substrate. Any adhesive tape used should be removed immediately after smoothing. We recommend the FS caulking gun and FS jointing trowel.

Important remarks

The function of the sealant can only be guaranteed if correctly applied in accordance with the technical recommendations given in this data sheet and in related standards. Sealant application in situations with strongly fluctuating temperatures (premature stressing of the sealant) must be avoided.

The sealant is compatible with many paints and lacquers. Owing to the large number of different coating systems on the market, own tests concerning adhesion and compatibility have to be performed prior to application. It is not overpaintable.

Good ventilation must be provided during application and curing to allow curing by-products to evaporate. Low temperatures, low humidities and joint depths above 15 mm can retard skin formation and curing significantly.

Exposure to liquid (eg acid-based cleaning agents, strongly coloured liquids) or gaseous chemicals for longer periods can result in discolouration of the product, especially for light colors (white). In general, the mechanical properties of the sealant are not adversely affected.

Technical Data

Technical property	Typical value *
• Density (DIN EN ISO 2811-1)	1.01 ± 0.03 g/cm³
• Slump (DIN EN 27390)	≤ 2 mm
• Skin formation time (23°C / 50% rH)	approx. 15 min
• Penetration (DIN 51579 / 5 sec.)	180 ± 30 1/10 mm
• Maximum movement capacity	25 %
• Cure rate (23°C / 50% rH)	approx. 2 mm in the first 24 h
• Shore A hardness (DIN 53505, 28d)	25 ± 5 units
• Tensile strength (100% elongation, DIN 52455)	app. 0.5 N/mm²
• Application temperature of fresh sealant	+5°C to +40°C
• Temperature stability range of fully cured sealant	-40°C to +180°C
• Shelf life store in closed original packages in a cool and dry place	18 months

For safety data, see Safety Data Sheet *Take all measures resulting from the safety data sheet and hazard markings to prevent accidents and protect health.*

Notes

* The reaction rate depends on temperature, humidity, depth of joint and substrate absorbency. The data given refer to tests at standard conditions (23°C / 50% rel. humidity). Under these conditions, a 10 x 10 mm joint will fully cure in app. 10 -14 days. Low humidity, low temperature and deeper joints will retard skin formation and curing significantly.

The data reported on this data sheet represent the current state of knowledge. This does not exempt the purchaser from carrying out his own careful inspections of incoming goods in individual cases. We reserve the right to make changes to the product data in the course of technical progress or due to operationally related further development. Owing to factors beyond our control during application, the recommendations given in this data sheet demand tests and experiments by the customer. Our recommendations do not exempt the customer from the obligation to check any infringements of third-party rights himself and eliminate them if necessary. The suggestions for product use are not equivalent to a warranty of its suitability for the recommended purpose.

Each new edition of this data sheet supersedes the previous one.

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