

Technical Data Sheet

EVT Prime Colours



Product description

Elastic single component silicone sealant for indoor and outdoor use with 25% movement capability.

Curing system

Neutral Curing Silicone

Special Properties

- Elastic silicone sealant
- Low odour formulation
- Available in a large number of RAL colours
- Ageing and weather-resistant, good UV resistance
- Excellent adhesion on metals and plastics, compatible with copper
- Contains a fungicide

Fields of application

EVT Prime Colours silicone is used for sealing joints in glass, window construction, in metal construction, in sanitary applications, in roofing and plumbing works, in heating, ventilation and air conditioning engineering units.

EVT Prime Colours must not be used in aquarium construction, on marble or natural stones. It should not be used as a mirror adhesive and in areas where there is direct food contact.

Prime Colours can be used to seal construction units that are subsequently filled with water. These applications require precise tooling (preparation of substrate; often primer necessary). Underwater joints must be checked on a regular basis and should be maintained from time to time. Not suitable for Polypropylene and certain Polyethylene products.

Yield

Meters of joint per 300ml cartridge for the following joint dimensions:

- 5 x 5 mmapprox. 12.0 m
10 x 10 mmapprox. 3.0 m

Colours and packaging

Colours: large Number of RAL colours available
Packaging: 300 ml cartridges, other pack 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). Before 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. On coated substrates (paints, lacquers), compatibility to the sealant must be tested.

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 application

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.

Tooling

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 establishes close contact and good adhesion to the substrate. Remove excess smoothing agent. Any adhesive tape used should be removed immediately after smoothing.

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 where temperatures are fluctuating must be avoided (premature stressing of the sealant).

EVT Prime Colours is compatible with many paints and lacquers. Owing to the large number of different coating systems on the market, adhesion and compatibility tests have to be performed prior to application. For example, it is known that alkyd resin based paints may give discolouration in combination with neutral curing silicones. Prime Colours is not over-paintable.

On powder coated substrates we recommend adhesion tests prior to application!

When EVT Prime Colours Silicone is in contact with bitumen, tar or plasticizer releasing substrates (e.g. EPDM, neoprene, and butyl), discolouration and/or loss of adhesion may occur.

Although EVT Prime Colour is a low odour formulation good ventilation must be provided during application to allow curing by-products to evaporate. Low temperatures, low humidity and joint depths above 15 mm can retard skin formation and curing significantly.

Exposure to liquid (e.g. acid-based cleaning agents, strongly colored liquids) or gaseous chemicals (e.g. tobacco smoke) for longer periods can result in discoloration of the product, especially for light colours of Prime Colours. However the mechanical properties of the sealant are not adversely affected.

Important remarks (continued)

At elevated temperatures, the fresh (non-cured) sealant can react with copper and copper containing metals, leading to discolouration. When applied on these metals, temperatures above 30°C and intense solar radiation have to be avoided during application and curing.

Although EVT Prime Colours contains a fungicide and protects joints from going mouldy good housekeeping plays a big role in keeping the joint clean, dry and free from substances, that may serve as nutrition medium for fungal growth (e.g. soap residues, skin scales).

Technical Data

CE-labelling (DIN EN 15651) (details see Declaration of Performance)	Type F ext-int CC (F25LM); Type G CC (G25 LM); Type S (XS 1)
Density (DIN EN ISO 2811-1)	1,02 ± 0,04 g/cm ³
Skin forming time (23°C/50% r.F)	app. 10 min
Penetration (DIN 51579 / 5 sec.)	150 ± 30 1/10 mm
Slump (ISO 7390)	≤ 2 mm
Cure rate (within first 24 hours)	app.2 mm
Shore A hardness (DIN 53505)	17 ± 5 units
Tensile strength (ISO 8339-A, 100%)	app. 0,4 N/mm ²
Maximum movement tolerance	25 %
Volume loss (DIN EN ISO 10563)	max. 5 %
Application temperature (sealant & substrate)	+5 to +35°C
Temperature stability range (fully cured sealant)	-40 to +150°C
Shelf life (originally closed packages)	18 months (+5 to +35°C, 50% relative humidity)

Rate of curing depends on temperature, humidity and depth of substrate. The data given refer to tests at standard conditions (23°C / 50% rel. humidity). Under these conditions, a 10 x 10 mm joint will cure in 8 to 14 days. Low temperature, low humidity and joint depth above 15 mm will retard skin formation and curing significantly.

Data given were determined shortly after production, and may slightly vary with increasing age of product and for different colours. They are not meant for specification purposes.

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.*

Information given in this data sheet is based on 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, recommendations given in this data sheet require 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.

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