BUILDING TRUST

PRODUCT DATA SHEET

Sikasil®-825

A low modulus, neutral cure silicone sealant

PRODUCT DESCRIPTION

Sikasil®-825 is a low modulus, neutral cure, alkoxy, low odour silicone sealant that adheres to a wide range of both porous and non-porous surfaces without the need for priming.

USES

- Perimeter pointing internally and externally around uPVC, wood and powder coated aluminium.
- Sealing and as an adhesive onto uPVC, plastic trims and components.
- Sealing soft metals such as lead, copper and zinc.
- Weather sealing and joint sealing to pre-formed panels and curtain walling, glazing sealing and draught proofing.
- Glass to glass and glass to aluminium sealing.
- Parapet and roof weather sealing applications.
- Ideal for precast concrete and masonry products, including brick, natural stone and terracotta.
- Suitable as an expansion joint sealant.
- Bedding and sealing of insulated glass units.

CHARACTERISTICS / ADVANTAGES

- Excellent tooling and slow skinning properties for large scale construction and glazing applications.
- Excellent adhesion - adheres to most common surfaces including glass, metals, plastics and wood (painted or unpainted), uPVC and polycarbonate.
- Excellent external weathering properties (over many years exposure).
- High viscosity non-slump formula.
- Resistant to fumed hydrogen peroxide and fumed formaldehyde once fully cured.

APPROVALS / STANDARDS

- Certified to ISO11600 F25LM and G25LM.
- UKCA / CE marked under EN15651 for cold climate, façade, glazing and sanitary applications.
- ASTM C719 Class 35.

PRODUCT INFORMATION

Chemical Base	Alkoxy silicone
Packaging	380 ml cartridge 600 ml foil pack
Colour	White, Black, Mid Grey, Dark Grey, Brick Red, Brown, Buff, Beige, Anthracite, Dark Anthracite RAL 7016, Magnolia, Portland Stone & Limestone White.
Shelf Life	12 months from date of manufacture
Storage Conditions	Store in original unopened containers between +5 °C and +25 °C. Storage outside these parameters may dramatically reduce shelf life
Density	Colours: 1.33 - 1.37 g/cm³

TECHNICAL INFORMATION

Shore A Hardness	ca. 30
Modulus of Elasticity in Compression	0.35 MPa (ISO 11432, 100 %)
Tensile Modulus of Elasticity	0.25—0.3 MPa (ISO 8339, 100 % elongation, +23 °C)
Shrinkage	<5 % (ISO 10563)
Elastic Recovery	>70 % (ISO 7389)
Tensile adhesion strength	0.5 MPa at break
Movement Capability	(ASTM C719) ±35 % (ISO 11600) ±25 %
Thermal Conductivity	0.10983 W/mK
Service Temperature	- 50 °C to + 150 °C
Joint Design	Maximum joint width 50 mm, max depth 50 % of joint width (from 10 mm) Joint widths are calculated as in BS6213: Width=(M x 100)/F + M Where M = movement and F = movement accommodation Factor For maximum movement accommodation, it is recommended that: 1. The sealant joint depth should be no less than 5 mm. 2. Joint depth should be 5 mm for joints up to 10 mm wide. 3. Joints above 10 mm in width should be half the width in depth up to 20 mm and minimum 10 mm for wider joints. Joint depth may be adjusted to the correct size using JOINT BACKER ROD.
Elongation at break	>200 % (ISO 8339, +23 °C)
Consumption	Joint Size (mm) — Linear metres per 380ml 5 x 5 — 15.10 5 x 10 — 7.60 10 x 15 — 2.52 10 x 20 — 1.90 12 x 25 — 1.28
Ambient Air Temperature	+ 5 °C to + 40 °C
Curing Time	mm/1 day approx 2 mm/3 days approx 6 mm/7 days approx 9
Skin Time	30 - 45 minutes (23 °C / 50 % RH)

VALUE BASE

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

LIMITATIONS

It is the user's responsibility to determine suitability for use. If in doubt, please contact Technical Services Department for advice.

- Do not use in conjunction with bitumen asphalt, neoprene and certain organic elastomers.
- Do not use in the manufacture of aquariums.
- Do not use on substrates that bleed oil, solvents or plasticisers.
- Not overpaintable.
- Not recommended for use as a mirror adhesive.
- Do not use on food grade applications – Use 565 Clean Room Silicone.
- Do not use for swimming pool joints.
- Can yellow if exposed to bleach or HCl based brick cleaners whilst curing.
- Staining from plasticiser migration may occur when used on cast, reconstituted or natural stone such as granite, marble or limestone substrates. Customers should test a sample prior to application.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Sikasil®-825 does not require a primer on most common surfaces, although adhesion tests are recommended prior to full scale application. If the joint is likely to be immersed or if adhesion is poor (especially on porous surfaces) use Sika® Primer-3 N or Sika® Primer-115. To improve adhesion (if required) to non-porous surfaces, prime with Sika® Aktivator-205.
Surfaces must be clean, dry and free from dust, grease and other contaminants. Remove dust with compressed air. Degrease by using a solvent soaked pad, following by wiping with a clean cloth. The following cleaning procedure and materials are recommended:

Glass	Degrease with alcohol or MEK
Aluminium, light alloys and stainless steel Other Metals	Degrease with alcohol or MEK Lightly abrade then degrease as above
Wood	Lightly abrade surface then remove dust
Plastics	Degrease using an agent recommended by plastics manufacturer
Concrete and other alkaline surfaces	Brush and remove dust
Polyester Powder Coated Aluminium (PPCA)	Sika® Cleaner P and Sika® Aktivator-205

APPLICATION METHOD / TOOLS

We recommend following Sika® Method Statement; Facade Joint Sealing for good working practice.

CLEANING OF TOOLS

Uncured sealant - white spirit / Sika® Wonder Wipes.
Cured sealant - mechanically.

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LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES