

Sikasil® SG-15

Structural Glazing / Weatherseal Neutral Cure Silicone Sealant

Typical Product Data (for further data please see Safety Data Sheet)

Chemical Base	1- C Silicone
Color	Multiple
Cure mechanism	Moisture
Cure type	Oxime
Density (uncured)	9.35 lbs. / gal.
Non-sag properties - Vertical @ 120 °F (49 °C) (ASTM C-639)	Non-sag
Slump (ASTM D-2202)	Nil
Skin Time (MNA Method)	15 minutes
Tack free time ^A (ASTM D-679)	25 minutes
Extrusion Rate g/min (ASTM C-1183 modified) 1/8" orifice @ 90 psi	300
Curing speed (MNA Method)	1/8 inch in 24 hours
Shore A-hardness (ASTM C-661)	18
Tensile strength (ASTM D-412)	210 psi (1.4 MPa)
Elongation at break (ASTM D-412)	650%
Bond durability - glass/ aluminum / concrete (ASTM-C793)	± 25%
Movement capability (ASTM C-719)	± 25%
Application Temperature	product substrate & air
	-35 – 140 °F (-32 – 40 °C) 40 – 105 °F (5 – 40 °C)
Service temperature	-80 – 350 °F (-62 – 176 °C)
Weathering Resistance	Excellent
Shelf life (storage below 77°F (25°C))	Cartridge, Drum, & Pail
	12 months

^{A)} 77 °F (25 °C) / 50% R.H.

Description

Sikasil® SG-15 is a versatile, structural glazing and/or weatherseal one-component, non-sag, elastomeric, neutral cure silicone sealant. Meets the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, G, A, O; ASTM C1184 Structural Silicone Sealant; TT-S-00230C, Type II, Class A;

Product Benefits

- Glazing and/or weatherseal applications with one product
- Outstanding UV and weathering resistance
- Versatile "Medium" modulus
- Excellent flexibility for dynamic joint movement
- Bonds to most substrates without priming

Areas of Application

- Structural glazing
- Conventional glazing
- Perimeter sealing of windows, doors, skylights
- Curtain wall expansion joints and unitized field assembly
- Panel stiffeners
- Expansion Joints

Typical substrates include Glass, Aluminum, metal, tile, fiberglass, plastic, ceramics, masonry, concrete, brick, stone, granite, powder-coated aluminum, fluoropolymer painted surfaces, vinyl, PVC, and wood. This product is suitable for experienced professional users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, label and Safety Data Sheet which are available at <http://usa.sika.com/> or on request at tsmh@us.sika.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, label and Safety Data Sheet prior to product use.



Cure Mechanism

Sikasil® SG-15 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly (see diagram below).

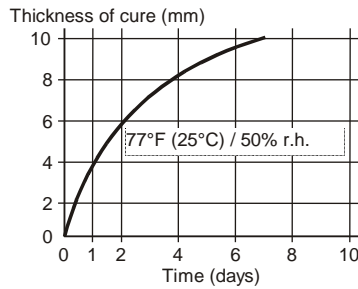


Diagram 1: Curing speed Sikasil® SG-15

Method of Application

Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. Sikasil® SG-15 is designed to obtain adhesion without the use of a primer; however, certain substrates may require a primer. Test by applying the sealant and/or primer sealant combination to confirm results and proposed application methods.

Application

The optimum temperature for substrate and sealant is between 15 °C and 25 °C. Sikasil® SG-15 can be processed with hand, pneumatic or electric driven piston guns as well as pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Corporation. Joints must be properly dimensioned. Basis for calculation of the necessary joint dimensions are the technical values of the adhesive and the adjacent building materials, the exposure of the building elements, their construction and size as well as external loads. Joints deeper than 15 mm must be avoided.

Tooling and Finishing

Tooling and finishing must be carried out within the skin time of the sealant or adhesive. When tooling freshly applied Sikasil® SG-15 press the adhesive to the joint flanks to get a good wetting of the bonding surface. No tooling agents to be used.

Removal

Uncured sealant may be removed from tools and equipment with solvents such as citrus based solvents or xylene, if cleaned before sealant has begun to cure. Strictly follow solvent manufacturer's instructions for use and warning statements. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed with soap and water immediately after use. **DO NOT USE SOLVENTS ON SKIN!**

Overpainting

Sikasil® SG-15 cannot be overpainted.

Application Limits

Recommended solution from Sika for structural glazing and window bonding are usually compatible to each other. These solutions consist of products such as Sikasil® SG, IG, WT as well as SikaHyflex®-300 and -600 series. For specific information regarding compatibility between various Sikasil® and SikaHyflex® products contact the Technical Department of Sika Corporation. To exclude materials influencing Sikasil® SG-15, all materials such as gaskets, tapes, setting blocks, sealants etc., in direct and indirect contact have to be approved by Sika in advance. Where two or more different reactive sealants are used, allow the first to cure completely before applying the next. The above mentioned Sika process materials may only be used in structural glazing or window bonding applications after a detailed examination and written approval of the corresponding project details by Sika Industry. Please also note the following:

- Allow treated wood to age six months before application.
- Brass and copper may be discolored. Test prior to application.
- Test porous surfaces such as concrete, masonry and natural stone for staining before use.

Further Information

Advice on specific applications will be given on request. To contact Sika Corporation's Industry Technical Services Department please send an email to tsmh@us.sika.com. Copies of the following publications are available on our website www.sikaindustry.com:

- Safety Data Sheets
- Product Data Sheets

Packaging Information

Cartridge	295 ml (10 fl. oz.)
Pail	4.5 gal
Drum	52 gal

Basis of Product Data

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

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Limited Material Warranty

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, label and Safety Data Sheet which are available at <http://usa.sika.com/> or on request at tsmh@us.sika.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, label and Safety Data Sheet prior to product use.

Sika Corporation
Industry Division
30800 Stephenson Highway
Madison Heights, MI 48071
USA
Tel. +1 248 577 0020
Fax +1 248 577 0810
www.sikaindustry.com