Sikasil® SG-10
Fast Cure Neutral Silicone Assembly Sealant

Technical Product Data (typical values)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pigmented</th>
<th>Translucent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Base</td>
<td>1-C silicone</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Pigmented</td>
<td>Translucent</td>
</tr>
<tr>
<td>Cure mechanism</td>
<td>Moisture</td>
<td>Moisture</td>
</tr>
<tr>
<td>Cure type</td>
<td>Oxime</td>
<td>Oxime</td>
</tr>
<tr>
<td>Density (uncured)</td>
<td>11.9 lbs./gal.</td>
<td>8.6 lbs./gal.</td>
</tr>
<tr>
<td>VOC</td>
<td>21 g/L (0.18 lb./gal.)</td>
<td>21 g/L (0.18 lb./gal.)</td>
</tr>
<tr>
<td>Non-sag properties - Vertical @120°F (49°C) (ASTM C-639)</td>
<td>Non-sag</td>
<td>Non-sag</td>
</tr>
<tr>
<td>Slump</td>
<td>(ASTM D-2202)</td>
<td>Nil</td>
</tr>
<tr>
<td>Skin Time</td>
<td>6 minutes</td>
<td>8 minutes</td>
</tr>
<tr>
<td>Tack free time</td>
<td>12 minutes</td>
<td>18 minutes</td>
</tr>
<tr>
<td>Extrusion Rate g/min (ASTM C-1183 modified) 1/8&quot; orifice @ 90 psi</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Curing speed</td>
<td>1/8 inch 12 hours</td>
<td>1/8 inch 12 hours</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Shore A-hardness</td>
<td>(ASTM C-661)</td>
<td>35 +/-5</td>
</tr>
<tr>
<td>Tensile strength psi (mpa)</td>
<td>(ASTM D-412)</td>
<td>300 psi (2.07)</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>(ASTM D-412)</td>
<td>400 %</td>
</tr>
<tr>
<td>Bond durability - glass/ aluminum / concrete</td>
<td>(ASTM-C793)</td>
<td>± 25 %</td>
</tr>
<tr>
<td>Movement capability</td>
<td>(ASTM C-719)</td>
<td>± 25 %</td>
</tr>
<tr>
<td>Application Temperature¹</td>
<td>-35° to 140°F (-32 to 40°C)</td>
<td>-35° to 140°F (-32 to 40°C)</td>
</tr>
<tr>
<td>Service temperature</td>
<td>- 80° to 350°F (-62.2° to 176°C)</td>
<td>- 80° to 350°F (-62° to 176°C)</td>
</tr>
<tr>
<td>Weathering Resistance</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Shelf life (storage below 90°F (32°C))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cartridge and Unipac</td>
<td>12 months</td>
<td>12 months</td>
</tr>
<tr>
<td>Drum and Pail</td>
<td>12 months</td>
<td>12 months</td>
</tr>
</tbody>
</table>

¹ Substrate and Air Temperature must be between 40° - 105°F (5° - 40°C). See "Application" Section for details.
² 77°F (25°C) / 50% r.h.

Description
Sikasil®-SG10 is a fast curing, one-component, non-sag, elastomeric, neutral cure silicone sealant. Meets the requirements of ASTM-C920, Type S, Grade NS, Class 25, Use NT, T, M, G, A, O; TT-S-00230C, Type II, Class A; TT-S-001543A, Class A; CAN/CGSB-19.13-M87, AAMA 802.3 Type I and II, AAMA 803.3 Type I, AAMA 805.2, AAMA 808.3 and California Air Resources Board 2003 requirements for Volatile Organic Compound content. Sikasil®-SG10 is especially suitable for window fabrication and has passed the Florida Hurricane Glazing Code when used in designed systems.

Product Benefits
- Extremely long service life
- Faster production capability in assembly processes
- High early green strength, fast cure
- Excellent flexibility for dynamic joint movement
- Bonds to most substrates without priming
- Compatible with IG sealants
- Enhanced adhesion PVC/Vinyl, glass, aluminum, metals, powder coated surfaces, tiles, fiberglass, plastic, ceramic and wood
- AAMA Certified component for standard and impact glazing when used in designed systems

Areas of Application
- Window and door fabrication
- Back bedding and cap, toe and heel beads
- Perimeter sealing of windows, doors and skylights
- Conventional and Impact glazing
- Kitchen and bath countertops/solid surfaces, Sanitary Seals
- Marine cabins
- Truck/Trailer/Auto/RV production
- Component assembly processes
- Typical Substrates
- Vinyl, glass, aluminum, powder coated aluminum, metals, tile, fiberglass, plastic, ceramic and wood
Coverage
Cartridge: Approximately 12.2 linear ft. (3.7 lin. m) for ½ x ¾ in (13 x 6 mm) bead.

Cure Mechanism
Sikasil®-SG10 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-10

Chemical Resistance
Sikasil®-SG10 is resistant to UV radiation, fresh water, seawater and proprietary aqueous cleaning agents; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; no resistance to organic acids, concentrated mineral acids, caustic solutions and solvents. The above information is offered for general guidance only. Advice on specific applications will be given on request. Contact Technical Service at (tsmh@sika-corp.com).

Method of Application
Surface preparation
The substrate must be clean, dry, frost free, sound and free of any oils, greases or incompatible sealers, paints or coatings that may interfere with adhesion. Project specific substrates must always be submitted for testing before consideration in high demand applications.

POROUS SUBSTRATES – clean by mechanical methods to expose a sound surface free of contamination.

NON-POROUS SUBSTRATES – for cleaning non-porous substrates, use two cloth cleaning method using isopropyl alcohol, xylene or an approved, clean, pure non-diluted industrial grade solvent. Allow solvent to evaporate completely prior to sealant application. Strictly follow solvent manufacturer’s instructions for safe handling.

Application
In all cases, make sure the joint design is correct. Proper joint design minimizes stresses on the sealant. Use masking tape if desired for areas adjacent to the joint to be sealed to prevent surface contamination. Apply sealant to dry, clean surfaces. An air operated or hand operated cartridge gun may be used. Do not break cartridge seal until just before use. Surfaces should be dried before the sealant is applied. Normally sealant skins in 8 minutes, dries to touch in 1 hour, and bonds in 24 hours.

This product is suitable for bulk dispensing straight from drums or pails by means of a pneumatic or hydraulic pump system. For advice on selecting and setting up a suitable pump system please contact our Technical Service Department at (tsmh@sika-corp.com).

Expansion Joint
Apply using professional caulking gun. Do not open product container until preparation work has been completed. Apply sealant using consistent, positive pressure to force sealant into the joint. Tool sealant to create a concave joint shape and ensure maximum adhesion. Dry tooling is recommended.

Adhesive Joint
Apply using professional caulking gun, dispensing equipment or trowel. Use sufficient quantity of adhesive to one or both substrates to provide designed contact area. Surfaces may be moved up to one hour after application without loss of adhesive strength.

Tooling and finishing
Tool joint, if necessary, and remove masking tape. Tooling should be completed in one continuous stroke. Tool immediately after sealant is applied and before a skin begins to form. Dry tooling – DO NOT USE soap or oil as a tooling aid. Remove masking tape immediately after tooling is completed. Complete Tooling of product within 5 minutes of sealant application.

PRIMING
Sikasil®-SG10 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. Refer to Technical Data Sheet for primers Sikasil®-2100 or Sikasil®-2300 available at www.sikausa.com or contact Technical Service for additional information at (tsmh@sika-corp.com).

Removal
Uncured sealant may be removed from tools and equipment with solvents such as isopropyl alcohol 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-10 cannot be overpainted.

Limitations
- Not intended for structural glazing applications. Contact Technical service at (tsmh@sika-corp.com) for specifics if required.
- Do not allow sealant to come in contact with solvent during cure.
- Do not allow sealant to come in contact with curing polyurethane sealants during cure.
- Not intended for water immersion. Sealant may be applied below freezing temperatures if substrates are completely dry, frost free and clean.
- Not recommended for absorptive surfaces such as natural stone particularly limestone or marble where staining may occur. Test before use.
- Do not apply to surfaces that will be painted.
- Do not apply to substrates that bleed oil, plasticizers or solvent.
- Do not apply to damp or wet substrates.
- Lower temperature and humidity will extend tack free and cure rates.
- Allow treated wood to age six months before application.
- Brass and copper may be discolored through contact; test sample prior to application.
- Test sensitive substrates, such as mirror backings for compatibility before use.

Further information available at: www.sikausa.com

Sika Corporation Industry Products
30800 Stephenson Highway
Madison Heights, MI 48071
MADE IN USA

WARNING: IRRITANT, SENSITIZER.
Contains Methyl ethylketoxime (CAS: 96-29-7), Oximino Silane (Trade Secret). Direct eye contact may cause irritation. Eye contact may cause conjunctivitis, corneal damage, or severe chemical burns. May cause skin irritation and sensitization. May be absorbed through the skin. May cause irritation to respiratory system. May cause drowsiness. May be harmful if swallowed. If heated, silicones can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant
to the eyes, nose, throat, skin, and digestive system. Product contains oximes, possible skin sensitizers.

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<tr>
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<th>*1</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>C</td>
</tr>
</tbody>
</table>

**FIRST AID**

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

**Handling And Storage**

Use with adequate ventilation. Product evolves Methyl ethyl ketoxime (MEKO) and methanol when exposed to water or humid air. Provide adequate ventilation to control MEKO within exposure guidelines. Keep container closed and store away from water or moisture or oxidizing materials.

When stored in the original, unopened containers at or below 90°F (32°C), shelf life is one year. A product skin may form in pails and drums, remove prior to use.

**Clean Up**

Observe personal protective equipment recommendations described in MSDS. Disposal of collected product, residues, and cleanup materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Ventilate area. Contain spill. Evacuate unprotected personnel from hazard area. Wipe up and contain for disposal. Cover with absorbant, place in approved drum. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard.

**Legal Notes/Disclaimer**

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika’s current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika’s instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika’s control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

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**Value Basis**

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

**Limited Material Warranty**

Manufacturer / Distributor 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.