Multisil® SCS5500

Construction & Glazing Silicone Sealant
Excellent Adhesion to Plastics

MANUFACTURER
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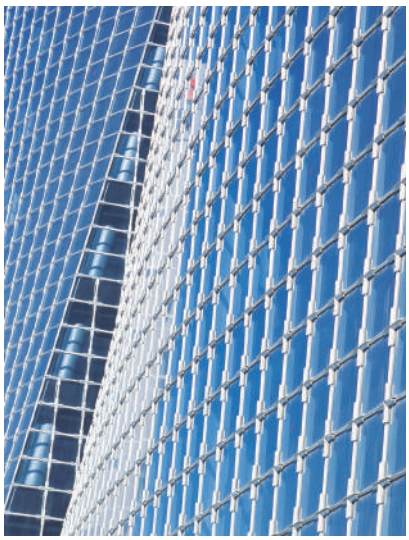
PRODUCT DESCRIPTION
Multisil® SCS 5500 Silicone Sealant is a one part, low modulus silicone sealant which undergoes a neutral cure when exposed to atmospheric moisture. The resulting rubber like seal exhibits high elasticity and excellent durability against sunlight, UV radiation, rain, snow and temperature extremes. The excellent weather resistance combined with a high movement capability ensures many years of continuous service in building joints and glazing applications.

KEY PRODUCT FEATURES
Multisil® SCS 5500 Silicone Sealant is a highly versatile sealant which will adhere to many common building materials such as glass, concrete, various metals and painted wood without the use of a primer*. The sealant is also designed to have excellent adhesion to a broad range of thermoplastics, examples being : ABS, PC**, PVC and PMMA***. Multisil® SCS 5500 Silicone Sealant passes the Lexan® chemical compatibility test of GE Advanced Materials, Plastics. It also complies with the stress corrosion test of Rohm when used with Plexiglas®.

* Qualification testing is advised. In certain cases the use of a primer can be required.
** Lexan® and Makrolon®
*** GE Toshiba Silicones recommends to always clean substrates prior to application. This is especially the case for plastics and in particular PMMA. Isopropylalcohol is widely used for cleaning purposes and should be applied using a clean lint free cloth. At least 20 minutes should be allowed for drying before applying sealant.



TYPICAL PROPERTIES

Uncured

Specific Gravity	g/cm³	1.03	
Application Rate	g/minute	400	6mm orifice, 2 Bar pressure
Sag	mm	< 2	ISO 7390
Tooling Time	minutes	10	@ 23°C, 50% relatie humidity
Tack Free Time	minutes	20	@ 23°C, 50% relatie humidity
Application Temperature	°C	+5/+40	

Cured

Hardness	Shore A	20	DIN 53505
Tensile at 100%Elongation	MPa	0.3	ASTM D412 (die C)
Tensile Strength	MPa	1.2	ASTM D412 (die C)
Elongation at Break	%	550	ASTM D412 (die C)
Tensile at 100% Elongation	MPa	0.32	ISO 8339 (glass substrate)
Tensile at Break	MPa	0.56	ISO 8339 (glass substrate)
Elongation at Break	%	300	ISO 8339 (glass substrate)
Volume Loss	%	3.1	ISO 10.563
Elastic Recovery	%	> 90	DIN 52458
Temperature Resistance	°C	- 50/+100	

SPECIFICATIONS
Typical product data values should not be used as specifications. Assistance and specifications are available by contacting GE Toshiba Silicones.

PACKAGING

Multisil® SCS 5500 Silicone Sealant is available in 10.1 fl.oz. (300ml) plastic caulking cartridges packaged in cartons of 24 units, and 19.9 fl.oz. (591.5ml) sausages packaged in cartons of 12 units.

COLOR

Multisil® SCS 5500 Silicone Sealant is available in 5 standard colors. Use the following product designations:

Product Designation	Color
SCS 5501	Translucent
SCS 5502	White
SCS 5503	Black
SCS 5505	Grey
SCS 5550	Brown

For further details, and requests for other colors, please contact GE Toshiba Silicones.

BASIC USES

Multisil® SCS 5500 Silicone Sealant is intended for use for perimeter seals around windows, curtain wall joints and other weatherseal applications between metals, masonry, concrete, glass, paints and plastic substrates such as glass, PVC, Polycarbonate and many other plastics. It can be used for interior sealing application where a low odor is advantageous during application and curing. The low modulus property allows use in joints subject to ±50% movement. This characteristic is maintained over a wide temperature range after full cure.

LIMITATIONS

Multisil® SCS 5500 Silicone Sealant is not recommended for: horizontal joints exposed to foot or vehicular traffic or in horizontal joints where prolonged water immersion occurs.

Multisil® SCS 5500 Silicone Sealant should not be applied on:

- Concrete surfaces which contain residual form oil or other bond breaking contaminants that may interfere with sealant adhesion.
- Building materials which might bleed oils or solvents; these include, but are not limited to, impregnated wood and certain vulcanized rubber gaskets or tapes, or failed sealants and caulking compounds.
- Areas where atmospheric contaminants might change the appearance of light colored sealants. Silicone sealant is weather-resistant and resists chalking, degradation and erosion. As a result, environmental contaminants tend to cling to the sealant and the sealant surface may take on the color of the contaminant. Darker color of the contaminant. Darker colors should be used to minimize this effect.
- Reflecting, high-gloss or light-colored surfaces where aesthetics are critical, until adequate on-site sealant, surface and ambient atmospheric test simulating building design are conducted to ascertain material compatibility and migration to adjacent surfaces under actual use conditions.
- Unpredictably absorptive surfaces such as marble or limestone, unless a standard of appearance has been agreed upon by the seller and the purchaser as a result of testing for stain or discoloration.
- Totally confined spaces, as the sealant requires atmospheric moisture for completion of cure and generation of properties.
- Surfaces which will be painted as painting over rubber, is not recommended. The paint film does not stretch with the extension of rubber and the adhesion of the paint to the sealant is not adequate.
- Surfaces with special or protective coatings, such as Teflon®, polypropylene or polyethylene without the approval of the manufacturer of the article, plastic or material.
- Unprepared or wet surfaces. Do not use water for tooling and do not apply to wet or damp surfaces.
- Surfaces where adhesion has not been verified by on-site testing under actual use conditions.
- Structural glazing applications as the adhesive bead.
- Applications where FDA or USDA compliance is required.

APPLICABLE STANDARDS

Contact GE Toshiba Silicones' Quality Assurance for details of certification to:

France : Label SNJF, first category primerless on glass, anodised aluminium and concrete.
Italy : Uni 9610/9611
UK : BS 5889 part A (obsolete since December 1996, replaced by ISO 11. 600).
Germany : DIN 18540 and DIN 18545 E.
International : ISO 11600 F + G 25 LM
Sweden : MTK
Belgium : ATG

TECHNICAL DATA

Multisil® SCS 5500 Silicone Sealant is basically unaffected by normal weathering conditions such as sunlight, ultraviolet radiation, rain, snow and temperature extremes. Its weatherability enables it to retain its properties after years of exposure. The sealant has resistance to detrimental effects caused by polluted atmospheres and many chemicals and chemical solutions. See Table 1 for Typical Properties. Joints formed with this sealant can be expected to extend and compress 100% of the installation width with no more than 50% in a single direction without affecting the sealant or adhesion. Multisil® SCS 5500 Silicone Sealant is compatible with laminated glass, insulating glass units and acrylic and Lexan® polycarbonate glazing sheet.

JOINT DESIGNS AND DIMENSIONS

Curtainwall expansion joints should be designed to allow installation and retention of the bond-breaking back-up material during the installation and subsequent curing of Multisil® SCS 5500 Silicone Sealant. Refer to "GE Toshiba Silicones Joint Design and Sealant Selection Design Guide".
Consult with GE Toshiba Silicones for recommendations on large or unusual application.

INSTALLATION

SURFACE PREPARATION

Clean all concrete, masonry and stone joints of all contaminants impurities. Concrete form release agents, water repellents, concrete laitance, all old sealants and other surface treatments and protective coatings are examples of materials which must be removed from the joint surfaces to obtain proper sealant adhesion. Porous substrates should be cleaned where necessary by grinding, saw cutting, blast cleaning (sand or water), mechanical abrading or combination of these methods to provide a sound, clean surface for sealant application. Dust, loose particles, etc., should be blown out of

joints with oil-free compressed air or vacuum cleaned. Clean all metal, glass and plastic procedures. Detergent or soap and water treatments are not recommended. Protective films must be removed by a solvent recommended by the manufacturer of the substrate or other means which leave no residue. In all cases where used, solvents should be wiped dry with a clean cloth or lintless paper towels. Cleaning solvents should not be allowed to air dry or evaporate without wiping. Architectural coating, paints and plastics should be cleaned with a solvent approved by the manufacturer of the product.
Cleaning of all surfaces should be done after one to two hours after the sealant is applied. CAUTION: SOLVENTS MAY BE FLAMMABLE AND/OR TOXIC.
Refer to "GE Toshiba Silicones Surface Preparation for Sealant Adhesion Design Guide"

PRIMING
Multisil® SCS 5500 Silicone Sealant has primerless adhesion characteristics to many common construction materials; however, some materials such as concrete, mill finish aluminum, galvanized steel and other materials with variable surface characteristics often require priming. In view of unpredictable surface characteristics, trial application should be made to check adhesion to the specific materials to be used on the project. SS4179 primer is recommended for concrete, some paints and plastic surfaces.

MASKING
The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces. Do not allow masking tape to touch clean surfaces to which the silicone sealant is to adhere. Masking tape should be removed immediately after the finish tooling of the Multisil® SCS 5500 Silicone Sealant is accomplished and before the sealant begins to cure.

APPLICATION
Install back-up material or joint filler, setting blocks, spacer shims and tapes as specified. Apply Multisil® SCS 5500 Silicone Sealant in a continuous operation, horizontally in one direction and vertically from the bottom to the top of the joint opening. A positive pressure adequate to properly fill and seal the joint width should be employed. Tool or strike the Multisil® SCS 5500 Silicone Sealant with light pressure to spread the material against the back-up material and the joint surfaces.
The light-weight consistency of Multisil® SCS 5500 Silicone Sealant responds easily to light tooling pressure and facilitates void-free placement. A tool with a concave profile is recommended to keep the Multisil® SCS 5500 Silicone Sealant within the joint.
In glazing, tool the sealant at the sill so that precipitation and cleaning solutions will not pool. Multisil® SCS 5500 Silicone Sealant can be applied at outdoor temperatures as low as -35°F (-37°C) provided that surfaces are clean, dry and frost-free.
Excess sealant should be cleaned from glass, metal and plastic surfaces while still incurred using a solvent. On porous surfaces the excess sealant should be allowed to progress through the initial cure or set-up. It should then be removed by abrasion or other mechanical means.

HANDLING & SAFETY
Material Safety Data Sheets (MSDS) are available upon request from GE Toshiba Silicones. Similar information for solvents and other chemicals used with GE Toshiba Silicones products may be obtained from your suppliers. When solvents are used, proper safety precautions must be observed. All solvents must be used only in well-ventilated areas. Exposure to high vapor concentrations must be avoided. When flammable solvents are used, storage, mixing, and use must be in areas away from heat, sparks, flame or other sources of ignition.

STORAGE AND SHELF LIFE
Multisil® SCS 5500 Silicone Sealant has a shelf life of 12 months from the date of manaufacture when stored in sealed containers at temperatures at or below 80°F (27°C). Refer to the "Use Before Date" on the packaging before use. In cases where shelf life has been exceeded, the local GE Toshiba Silicones representative should be contacted for further information, prior to intended use of this material.

AVAILABILITY
Products may be ordered from GE Toshiba Silicones sales office nearest you or where appropriate, an authorized GE Toshiba Silicones' product distributor. For cost information, contact a local distributor or nearest GE Toshiba Silicones Technical Center.

GOVERNMENT REQUIREMENT
Prior to considering use of a GE Toshiba Silicones product in fulfilling any Government requirement, please contact GE Toshiba Silicones Customer Service department to determine if all government requirements can be met.

LIMITED WARRANTY
GE Toshiba Silicones warrants that its product will conform to GE Toshiba Silicones specifications at the time of application or use. The product must be stored in accordance with GE Toshiba Silicones recommendations, and used or applied before the earliest of (i) the indicated "Use Before Date", (ii) one year from date of purchase, or (iii) expiration of such other period or recommended storage time stated in the GE Toshiba Silicones product literature. If notified, in writing, of a claim within six months of the product's use or application, GE Toshiba Silicones will, at its option, replace or return the purchase price of any GE Toshiba Silicones product which does not satisfy the forgoing warranty. THE FOREGOING SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY FOR DEFFECTS OR FAILURE OF THE PRODUCT, AND THE SOLE AND EXCLUSIVE LIABILITY OF GE TOSHIBA SILICONES. THE WARRANTIES STATED ABOVE ARE IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF PURPOSE.

LIMITATION OF LIABILITY
GE Toshiba Silicones shall in no event, whether the claim is based on warranty, contract, tort, strict liability, negligence or otherwise, be liable for incidental or consequential damages, or for any damages in excess of the amount of the purchase price.
Note: For many products, GE Toshiba

Silicones may be able to offer a more extensive, application specific warranty. For further information, contact a GE Toshiba Silicones field representative.

MAINTENANCE

No maintenance is needed. If silicone sealant becomes damaged, replace damaged portion. Clean surfaces in damaged area and repair with fresh silicone sealant. Refer to "GE Toshiba Silicones Remedial Caulking Design Guide".

TECHNICAL SERVICES

Complete technical information and literature are available from GE Toshiba Silicones. Laboratory facilities and application engineering are available upon request from GE Toshiba Silicones. Any technical advice furnished by GE Toshiba Silicones or any representative of GE Toshiba Silicones, concerning any use of application of any sealant is believed to be reliable but GE Toshiba Silicones makes no warranty, express or implied, of any use of application for which advice is furnished.

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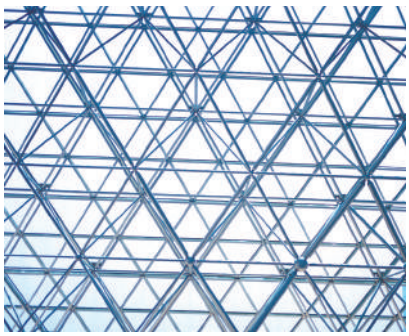

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