

High Performance Weather Sealant

SEALANT-456LS

SEALANT-456LS is a one-part, neutral-curing and non-stain* premium silicone sealant. This sealant has reduced staining and bleeding properties on the substrates than conventional sealant. Once cured, this sealant becomes a medium modulus silicone rubber suitable for conventional glazing and weatherseal applications (non-structural glazing). This sealant contributes to the superior design and high reliability of buildings.

* In accordance with ASTM C1248.

1 Features

- One-part and neutral-cure RTV*¹ silicone sealant
- Superior weatherability performance when exposed to a wide range of temperatures, moisture, ozone, and ultraviolet rays
- Non-staining*² properties for most substrates including stone and porous substrates
- Reduced staining properties on the substrates and bleeding properties to the substrates than conventional sealant
- Excellent storage stability within a wide range of temperatures
- Excellent unprimed adhesion to most common building materials and easy-to-use in a wide range of temperatures
- ±50% Joint Movement Capability of the original joint width

*¹ RTV stands for "room temperature vulcanizing" which means that this material can be cured at room temperature.

*² In accordance with ASTM C1248



Package image

2 Applications

Conventional glazing and weatherseal applications

4 Colors

Black, Gray

3 Specifications

- ASTM C920*¹ Type S, Grade NS, Class 50, Use NT, G, A, M
- KS F 4910*² F-25LM

*¹ Standard Specification for Elastomeric Joint Sealants *² Sealants for sealing and glazing in buildings

5 Packaging

600 mL sausages (20 pcs/carton box)

6 General properties

Parameter	Product name	SEALANT-456LS
Consistency		Paste
Slump	mm	0
Skin-Over Time at 23°C/50%RH	min	40
Density at 25°C	g/cm ³	1.3
VOC Content*	g/L	54
After cured - After 7 days at 23°C/50%RH		Reference Test
Hardness Shore A	ASTM D2240	22
Tensile strength	MPa	1.9
Elongation at break	%	1,100
After cured - After 21 days at 23°C/50%RH		Reference Test
50% Tensile stress	MPa	0.3
Joint movement capability	%	±50
Staining	ASTM C1248	Pass

* Based on SCAQMD, Reported Volatile Organic Compound (VOC) content was expressed as grams of volatile organic compounds per litre of submitted sample.

(Not specified values)

7 Instructions for use & Handling precautions

Please read the latest Shin-Etsu published Functional Sealants Technical Manual. The manual can be obtained from the Shin-Etsu website.

<http://www.shinetsusilicone-global.com/>

8 Important

1) Please insure that application procedures and quality control are in strict compliance with the latest Shin-Etsu published Functional Sealants Technical Manual. Before applying sealant, applicators are required to obtain the manual from the Shin-Etsu website.

<http://www.shinetsusilicone-global.com/>

- 2) All quality control test results must be logged and archived.
- 3) The Shin-Etsu Sales Department is available for specific advise.

9 Limitations

- 1) SEALANT-456LS must not be used and is not approved for structural glazing.
- 2) SEALANT-456LS must not be used in food, medical or pharmaceutical applications.
- 3) The contents of this catalog are believed to be correct, but project conditions regarding actual application and use of Shin-Etsu sealant are beyond Shin-Etsu's control. Therefore it is the users responsibility to confirm the product meets the requirements of the application.
- 4) Shin-Etsu warrants only the sealant will confirm to Shin-Etsu's product specifications at the time of shipment, and makes no further warranties in respect of the sealant. Warranty remedy for such failure is limited to refund of purchase price or replacement of product. If applicators need extended warranty

for performance of sealants, please contact the Shin-Etsu Sales Department in advance of the project inception.

10 Storage conditions

Temperature: at or below 30°C

* Seal container tightly and store in a cool, dark place (out of direct sunlight) with good ventilation. Keep away from heat and flame.

11 Shelf life

12 months after production date under the above storage conditions in the original unopened container

12 Safety and hygiene

- 1) Uncured SEALANT-456LS may cause skin irritation. When handling the products, take care to avoid contact with the skin and mucous membranes by wearing protective glasses and protective gloves. In case of skin contact, immediately wipe off with dry cloth and then flush thoroughly with running water. When using, be careful not to rub eyes with hands. In case of accidental eye contact, flush immediately with plenty of clean water for at least 15 minutes and then seek medical attention. Contact lens wearers must take special care. If the products get into the eye, the contact lens may become stuck to the eye.
- 2) Be sure to provide adequate ventilation when using the product. During curing, a small amount of Methyl Ethyl Ketone Oxime (MEKO) gas is gradually generated. If you become uncomfortable with inhaling vapors, move to an area with fresh air immediately.
- 3) Keep out of reach of children.
- 4) Please read the Safety Data Sheets (SDS) before use. SDS can be obtained from our Sales Department.



Shin-Etsu Chemical Co., Ltd.

Silicone Division Sales and Marketing Department Ⅳ

Phone : +81-(0)3-6812-2411 Fax : +81-(0)3-6812-2415

Shin-Etsu do Brasil Representação de Produtos Químicos Ltda.

Phone : +55-11-3939-0690 Fax : +55-11-3052-3904

Shin-Etsu Singapore Pte. Ltd.

Phone : +65-6743-7277 Fax : +65-6743-7477

Shin-Etsu Silicones (Thailand) Ltd.

Phone : +66-(0)2-632-2941 Fax : +66-(0)2-632-2945

Shin-Etsu Silicone Korea Co., Ltd.

Phone : +82-(0)2-590-2500 Fax : +82-(0)2-590-2501

Shin-Etsu Silicones Vietnam Co., Ltd.

Phone : +84-(0)28-35355270

Shin-Etsu Silicone International Trading (Shanghai) Co., Ltd.

Phone : +86-(0)21-6443-5550 Fax : +86-(0)21-6443-5868

Shin-Etsu Silicones India Pvt. Ltd.

Phone : +91-11-43623081 Fax : +91-11-43623084

•The data and information presented in this catalog may not be relied upon to represent standard values. Shin-Etsu reserves the right to change such data and information, in whole or in part, in this catalog, including product performance standards and specifications without notice. •Users are solely responsible for making preliminary tests to determine the suitability of products for their intended use. Statements concerning possible or suggested uses made herein may not be relied upon, or be construed, as a guaranty of no patent infringement. •For detailed information regarding safety, please refer to the Safety Data Sheet (SDS). •The silicone products described herein have been designed, manufactured and developed solely for general industrial use only; such silicone products are not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of the silicone products described herein for any application, to make preliminary tests, and to confirm the safety of such products for their use. •Users must never use the silicone products described herein for the purpose of implantation into the human body and/or injection into humans. •Users are solely responsible for exporting or importing the silicone products described herein, and complying with all applicable laws, regulations, and rules relating to the use of such products. Shin-Etsu recommends checking each pertinent country's laws, regulations, and rules in advance, when exporting or importing, and before using the products. •Please contact Shin-Etsu before reproducing any part of this catalog. Copyright belongs to Shin-Etsu Chemical Co., Ltd.

<https://www.shinetsusilicone-global.com/>