

Glazing and Cladding Sealant

SEALANT-457

SEALANT-457 is a one-part, neutral cure, silicone sealant for use in general weather sealing applications.

Once cured this sealant becomes a high modulus silicone rubber with a movement accommodation factor of $\pm 35\%$ of the original joint width.

This sealant contributes to the superior design and has excellent durability and resistance to UV.

(not suitable for structural or insulating glazing applications).

1 Features

- One-part and neutral-cure RTV* silicone sealant
- Superior weatherability performance when exposed to a wide range of temperatures, moisture, ozone, and ultraviolet rays
- Excellent unprimed adhesion to most common building materials and easy-to-use
- $\pm 35\%$ Joint Movement Capability of the original joint width

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

2 Applications

General Weather Sealing, Glazing and Cladding Sealant

* It can not be used on Polycarbonate and certain metals including copper and brass

3 Specifications

- ASTM C920*1 Class 35
- KS F 4910*2 F-25LM

*1 Standard Specification for Elastomeric Joint Sealants

*2 Sealants for sealing and glazing in buildings

6 General properties

Parameter	Product name	SEALANT-457
Consistency		Paste
Slump	mm	0
Tack-free time at 23°C/50%RH	min	6
Density at 23°C	g/cm ³	1.44
After cured - After 7 days at 23°C/50%RH		Reference Test
Hardness Shore A	Points	ASTM D2240
		21
Tensile strength	MPa	ASTM D412
Elongation at break	%	
		650
After cured - After 21 days at 23°C/50%RH		Reference Test
50% Tensile stress	MPa	ASTM C1135
Maximum tensile stress	MPa	
		0.52
Joint movement capability	%	ASTM C719
		± 35

(Not specified values)



Package image

4 Colors

Black, White, Light gray, Gray, Dark gray, Brown, Dark brown, Forged iron

5 Packaging

600 mL sausages (20 pcs/carton box)

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.

<https://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.
<https://www.shinetsusilicone-global.com/>
- 2) All quality control test results must be logged and archived.
- 3) The Shin-Etsu Sales and Technical Departments are available for specific advise. If more detailed information is required please contact your local Shin-Etsu office.

9 Limitations

- 1) SEALANT-457 must not be used and is not approved for structural glazing.
- 2) SEALANT-457 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 application for each project.
- 4) Shin-Etsu warrants that 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.
- 5) In the event of any claim under the warranty, the remedy is limited to a refund of the original purchase price or replacement of the product. If the application requires an 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

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

12 Safety and hygiene

- 1) Uncured SEALANT-457 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 Methanol 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.

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