

PRODUCT DESCRIPTION

LOCTITE® SI 5619 provides the following product characteristics:

Technology	Silicone
Chemical Type	Alkoxy silicone
Appearance, (component A)	Black Paste
Appearance, (component B)	White Paste
Components	Two components - requires mixing
Mix Ratio, by volume (component A:B)	4 : 1
Viscosity	Thixotropic paste
Cure	Room temperature cure and Atmospheric moisture
Application	Sealing
Specific Benefits	Self-levelling

LOCTITE® SI 5619 is a two component fast cure silicone with good bond strength to porcelain coated metals, stainless steel and Ceran® glass. Typical applications include ceran glass cook top oven edge sealing and other sealing with self-levelling requirement.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Component A:

Specific Gravity @ 25 °C	1.14
Viscosity, Cone & Plate, 23 °C, mPa·s (cP):	
Spindle CP25, speed 2.5 rpm	19,000

Component B:

Specific Gravity @ 25 °C	1.47
Viscosity, Cone & Plate, 23 °C, mPa·s (cP):	
Spindle CP25, speed 2.5 rpm	20,000

TYPICAL CURING PERFORMANCE

The mixing of component A and component B initiates the reaction and the product will form a solid elastomer in approximately 30 minutes, regardless of the thickness. There is a secondary reaction of this product with atmospheric moisture that liberates the condensation cure over time.

Skin Over Time

Skin over time is the time the surface of adhesive forms a skin upon exposure to atmospheric moisture at 23°C/50% RH

Skin Over Time, minutes	10
Cured @ 23°C/50% RH	

Fixture Time

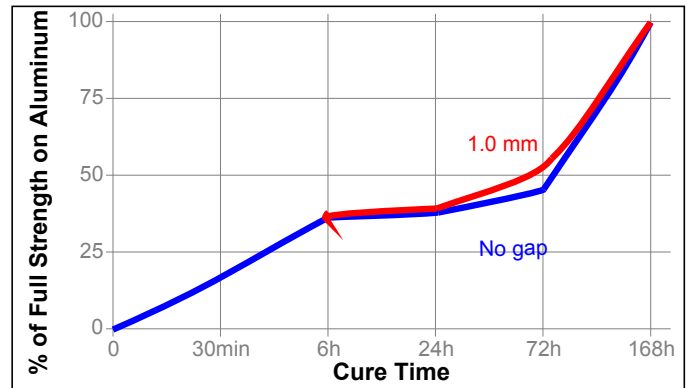
Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Fixture Time, ISO 4587, minutes:

Aluminum (Alclad) @ 23°C 15

Cure Speed vs. Time

The graph below shows the shear strength developed overtime at 23 °C, 50 % RH on Aluminium (Alclad) and tested according to ISO 4587.



TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 1 week @ 23 °C / 50% RH

Physical Properties:

Shore Hardness, ISO 868, Durometer A	35
Elongation, at break, ISO 527-3, %	200
Tensile Strength, ISO 527-3	N/mm ² 0.9
	(psi) (130)
Tear Strength, ISO 34-1, Die C	N/mm 1.1
	(lb/in) (6.3)

Water Absorption, ISO 62, %:

24 hour in water @ 23 °C 1.33

Coefficient of Thermal Expansion, K⁻¹

ISO 11359-2 3.19×10⁻⁴

Volume Shrinkage, %

1.05

Linear Shrinkage, %

0.35

Adhesive Properties:

Lap Shear Strength, ISO 4587, 0 mm gap:

Aluminum (Alclad)	N/mm ² 1.0
	(psi) (145)
Steel	N/mm ² 1.9
	(psi) (275)
Stainless steel	N/mm ² 1.9
	(psi) (275)
Glass	N/mm ² 3.0
	(psi) (435)

Polycarbonate	N/mm ²	1.5
	(psi)	(217)
ABS	N/mm ²	0.3
	(psi)	(43)

TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 1 week @ 23°C/ 50% RH

Heat Aging

Aged at temperature indicated and tested @ 23°C

Aged @ 50 °C for 1,000 hours:

Change in Tensile Strength, %	-6
Change in Elongation, %	-20

Aged @ 100 °C for 1,000 hours:

Change in Tensile Strength, %	-17
Change in Elongation, %	-32

Aged @ 150 °C for 1,000 hours:

Change in Tensile Strength, %	-40
Change in Elongation, %	-34

Aged @ 200 °C for 1,000 hours:

Change in Tensile Strength, %	-29
Change in Elongation, %	-38

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use

1. For best performance the surfaces should be clean and free from grease.
2. Best results are achieved utilizing 10.7mm square nozzle for manual dispensing, round nozzle for automatic dispensing, all with 24 element mix nozzle.
3. The product should not remain in the static mixer longer than 2 mins to maintain low viscosity for self-leveling.
4. After dispense, mate parts immediately to ensure maximum bond strength.
5. **Dual Cartridges:** To use simply insert the cartridge into the application gun and start the plunger into the cylinders using light pressure on the trigger. Next, remove the cartridge cap and dispense the first 3-5cm of mixed adhesive to be sure both part A and part B are flowing. Attach the mix nozzle to the end of the cartridge and begin dispensing onto part. **Bulk Containers:** Utilize volumetric dispense system to ensure proper mix ratio and utilize mix nozzle to obtain adequate mixing.
6. Keep assembled parts from moving during cure. The bond should be allowed to develop full strength before subjecting to any service load.
7. Excess material can be easily wiped away with non-polar solvents.
8. For fully automated applications a volumetric dispensing system is recommended.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product Specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact a Henkel representative for related approval or certificate of this product.

Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23 °C / 50% RH = 23+2 °C / 50+5% RH.

Conversions

(°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil

mm / 25.4 = inches

µm / 25.4 = mil

N x 0.225 = lb

N/mm x 5.71 = lb/in

N/mm² x 145 = psi

MPa x 145 = psi

N·m x 8.851 = lb·in

N·m x 0.738 = lb·ft

N·mm x 0.142 = oz·in

mPa·s = cP

Disclaimer

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