

LOCTITE® SI 5608

March 2022

PRODUCT DESCRIPTION

LOCTITE® SI 5608 provides the following product characteristics:

Technology	Silicone
Chemical Type	Alkoxy silicone
Appearance (Component A)	White paste
Appearance (Component B)	White paste
Components	Two components - requires mixing
Mix Ratio by volume: (Component A : B)	2 : 1
Viscosity	Thixotropic paste
Cure	Room temperature cure and Atmospheric moisture
Application	Bonding and Sealing
Specific Benefits	Bonding and Sealing with anti-fungi properties

LOCTITE® SI 5608 is a two component, fast cure silicone with excellent bond strength to glass, metals and Ceran®. LOCTITE® SI 5608 has excellent hot strength up to 180°C. Typical applications include sealing/bonding glass stovetop assemblies, weld and rivet reduction in high temperature applications, and other high temperature bonding applications. LOCTITE® SI 5608 have anti-fungi properties, confirmed test according to ISO 486, method B.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Component A

Specific Gravity @ 23°C	1.3
Viscosity, Cone & Plate, mPa·s (cP):	65,000
PK 100, PK1, 2° Cone @ 20 s ⁻¹	

Component B

Specific Gravity @ 23°C	1.7
Viscosity, Cone & Plate, mPa·s (cP):	40,000
Spindle CP20-2 Deg @ 20 s ⁻¹	

TYPICAL CURING PERFORMANCE

The mixing of component A and component B initiates the reaction and the product will form a solid elastomer in approximately 21 minutes, regardless of the thickness. There is a secondary reaction of this product with atmospheric moisture that liberates the condensation cure by-products as well as develops adhesion over time.

Skin Over Time

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

Skin Over Time, minutes	21
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:	
Aluminium Alclad@ 23 °C	13

TYPICAL PERFORMANCE OF CURED MATERIAL

Cured for 1 week @ 23 °C / 50% RH

Physical Properties

Shore Hardness, ISO 868 , Durometer A	30
Elongation at break, ISO 527-3, %	200
Tensile Strength , ISO 527-3	N/mm ² 1.0 (psi) (150)
Coefficient of Thermal Expansion, K ⁻¹	280×10 ⁻⁶
ISO 11359-2	

Electrical Properties

Surface Resistivity, IEC 60093, Ω	46×10 ¹⁵
Volume Resistivity, IEC 60093, Ω·cm	210×10 ¹⁵

Adhesive Properties

Cured for 1 week @ 23 °C / 50% RH and 0 gap

Lap Shear Strength, ISO 4587:

Aluminum (Alclad)	N/mm ² 2.5 (psi) (370)
Steel	N/mm ² 1.7 (psi) (250)
Stainless Steel	N/mm ² 1.8 (psi) (260)
Copper	N/mm ² 2.2 (psi) (320)
Brass	N/mm ² 1.8 (psi) (260)
Polycarbonate	N/mm ² 1.5 (psi) (220)
ABS	N/mm ² 0.1 (psi) (14)
PET	N/mm ² 1.4 (psi) (200)
Nylon	N/mm ² 1.0 (psi) (150)
GRP	N/mm ² 1.8 (psi) (260)

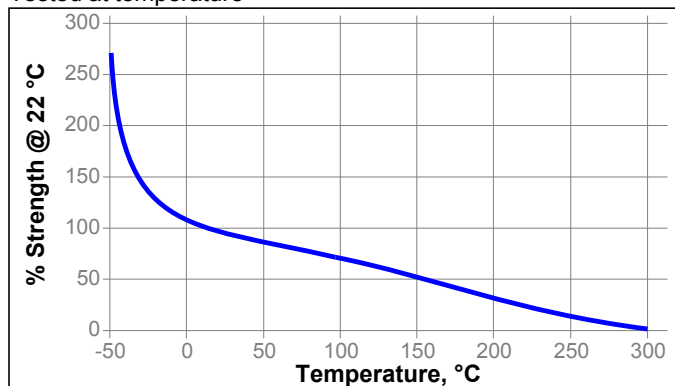
TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 1week @ 23°C / 50% RH

Lap Shear Strength, ISO 4587:
Aluminum (Alclad)

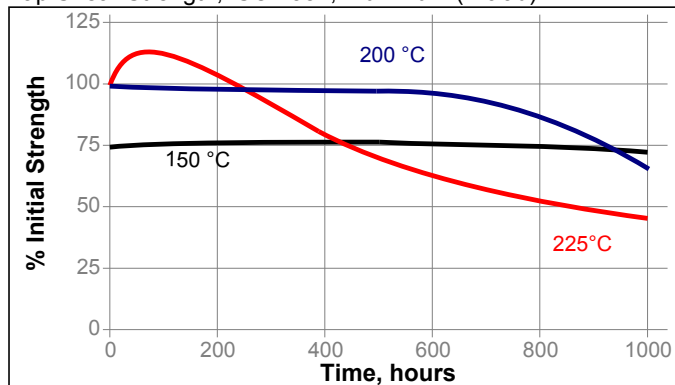
Hot Strength

Tested at temperature

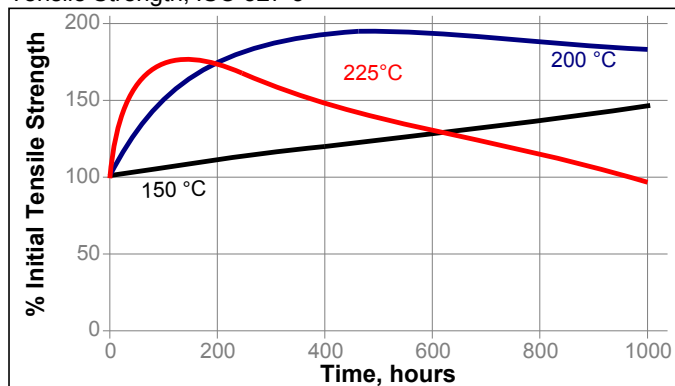
**Heat Aging**

Aged at temperature indicated and tested @ 23°C.

Lap Shear Strength, ISO 4587, Aluminum (Alclad)



Tensile Strength, ISO 527-3

**Chemical/Solvent Resistance**

Cured for 1week @ 23°C, on Aluminum Alclad with 1.0 mm gap, aged under conditions indicated and tested @ 23°C.

Environment	°C	% of initial strength	
		500 h	1000 h
Water	60	100	70
Water	90	70	40
Water/glycol	120	40	30
Motor oil (15W50)	150	95	50
IRM 902	150	130	70

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

- For best performance the mating surface should be clean and free of grease.
- Best results are achieved utilizing 10.7mm square nozzle for manual dispensing, round nozzle for automatic dispensing, all with 24 element mix nozzle.
- The product should not remain in the static mixer longer than 3 mins.
- After dispense, mate parts immediately to ensure maximum bond strength.
- 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.
- Keep assembled parts from moving during cure. The bond should be allowed to develop full strength before subjecting to any service load.
- Excess material can be easily wiped away with non-polar solvents.
- For full automatic 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 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. 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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Disclaimer

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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