

## LOCTITE® SI 5631™

October 2023

### Product description

LOCTITE® SI 5631™ has the following product characteristics:

<b>Technology</b>	Silicone
Chemical type	2K addition cure
Appearance (cured)	Pink
Appearance - Part A	Red
Appearance - Part B	White
Mix ratio, by volume (Component A : B)	1:1
Mix ratio, by weight (Component A : B)	1:0.93
<b>Cure</b>	80°C x 30 min
<b>Application</b>	Electronic assemblies

LOCTITE® SI 5631™ is a two part, fast cure, low viscosity, self-leveling silicone for thermal potting applications. It features high thermal conductivity, excellent electrical insulation properties, a convenient mix ratio and can be cured over a wide range of temperatures.

### Typical properties of uncured material

#### Part A Properties

Specific Gravity, ASTM D792 @ 25°C, g/cc	1.69
Viscosity @ 25 °C, mPa·s (cP) @ 10 s <sup>-1</sup>	5,500

#### Part B Properties

Specific Gravity, ASTM D792 @ 25°C, g/cc	1.57
Viscosity @ 25 °C, mPa·s (cP) @ 10 s <sup>-1</sup>	4,500

#### Mixed Properties

Specific Gravity, ASTM D792 @ 25°C, g/cc	1.63
Viscosity @ 25 °C, mPa·s (cP) @ 10 s <sup>-1</sup>	5,000
Working life @ 25°C, minutes	>60

### Typical properties of cured material

#### Physical properties

Hardness, Shore A, ASTM D2240	28
Elongation, ASTM D412, %	>150
Tensile Strength, ASTM D412, MPa	>1.0
CTE, ASTM E831, ppm/K	239
Flammability, UL 94	V0

#### Thermal properties

Thermal conductivity, ISO22007-2, W/(m·K)	1.0
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### Electrical properties

Dielectric constant, ASTM D150, °C, @ 1000 Hz	4
Dielectric Strength, ASTM D149, kV/mm	>20
Volume resistivity, ASTM D257, Ω·cm	1x10 <sup>13</sup>

### General information

The cure of this silicone product may be inhibited through contact with certain contaminants. Avoid contact with butyl and chlorinated rubbers, amines, sulfur or sulfur containing materials, tin containing compounds, or heavy metal salts.

For safe handling information on this product, consult the Material Safety Data Sheet.

### Direction for use

Some filler settling is common during shipping and storage. For this reason, the resins are stirred prior to use. Avoid air introduction during stirring. Continuous stirring and avoid air trap is recommended while in the tanks. Check the corner in drum of the settling to be stirred.

### Storage

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

### Optimal storage: at 5 to 25°C.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel 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.

### 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/mm <sup>2</sup> 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

## Additional information

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Reference 2