

**LOCTITE SI 100**

January 2014

**PRODUCT DESCRIPTION**

LOCTITE SI 100 provides the following product characteristics:

<b>Technology</b>	Silicone grease
Appearance	gray
<b>Application</b>	Thermal management
Typical Assembly Applications	CPUs, GPUs, MCUs, ASICs, DC-DC converters, IGBT and Transistors
Operating Temperature	-40 to 150 °C

LOCTITE SI 100 is recommended for high-temperature heat transfer in normal applications. It is used between heat generating devices and the surfaces to which they are mounted or other heat dissipating surfaces. This product delivers excellent thermal resistance, offers high thermal conductivity and virtually no evaporation over a wide operating temperature range. It is nonflammable, oxidation resistant and does not promote rust or corrosion.

**TYPICAL PROPERTIES**

Viscosity, Cone & Plate, mPa·s (cP):	
Temperature: 25 °C, Shear Rate: 0.5 s <sup>-1</sup>	350,000
Specific Gravity @ 25 °C	1.94
Thermal Conductivity, W/(m·K)	3.4
Thermal Impedance ASTM-D-5470, °C.in <sup>2</sup> /W: 80psi	0.017

**GENERAL INFORMATION**

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

**DIRECTIONS FOR USE**

1. For best results parts to be covered should be clean and free of oil and debris.
2. Apply appropriate material to substrate so that there is enough material to cover 100% of the surface between the component and the heat sink and the material leaves a small fillet.
3. Place the heat sink on top of the component and secure with clips, screws or other hardware.

**Storage**

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

**Optimal Storage: 5°C to 30°C. Storage below 5°C or greater than 30°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 Technical Service Center or Customer Service Representative.

**Not for product specifications**

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

**Conversions**

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

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