

LOCTITE[®] SI 5633[™]

March 2021

PRODUCT DESCRIPTION

LOCTITE[®] SI 5633[™] provides the following product characteristics:

Technology	Silicone
Chemical Type	2K additional cure
Appearance (cured)	Pink
Appearance - Part A	Red
Appearance - Part B	White
Mixing Ratio, by volume Component A : Component B	1 : 1
Mixing Ratio, by weight Component A : Component B	1 : 0.93
Curing Condition	80°C x 30 min
Application	Electronic assemblies

LOCTITE[®] SI 5633[™] are 2K additional cure silicone for sealing application. This product is non-corrosive thermal conductive potting for electronic assemblies.

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 ⁻¹	5,500

Part B Properties

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

Mixed Properties

Specific Gravity, ASTM D792 @ 25°C, g/cc	1.63
Viscosity @ 25 °C, mPa·s (cP) @ 10 s ⁻¹	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
---	-----

Electrical Properties

Dielectric Constant, ASTM D150, °C, @1,000Hz	4
Dielectric Strength, ASTM D149, kV/mm	>20
Volume Resistivity, ASTM D257, Ω·cm	10E13

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 (MSDS).

Directions For Use:

1. Some filler settling is common during shipping and storage. For this reason, the resins are stirred prior to use. Avoid air introduction during stirring. .

Storage

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

Optimal Storage: 5 to 25°C

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.

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. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 1