

# TC100

## Gap Filler, Thermal Interface Materials

**Saint-Gobain® ThermaCool® TC100** is an unsupported thermally conductive solid silicone rubber. This material offers thermal conductivity along with electrical isolation for heat transfer applications. TC100 can be used to fill air gaps between PC boards and heat sinks where a firm, robust material is needed.

**ThermaCool TC100** viscoelastic core is specially designed to provide the following features:

- Filled silicone rubber material that does not require curing
- Formulated to provide clean release from most surfaces
- Material is rigid enough to be easily die cut
- Gap filler can be readily repositioned
- Ideal for applications where gaps are  $>.020$  and can accommodate high pressure force of 100 psi
- Provides good vibration isolation of components that also require thermal transfer

### Available Sizes

Standard thickness: .025, .031, .050 and .063 in.  
(.64, .79, 1.27 and 1.6 mm)

Master roll size: 18 in. x continuous yard length

Master sheet size: 18 x 36 in. (457 x 914 mm)



## APPLICATIONS

- Telecommunication
- Computers
- CD-ROM cooling
- Automotive electronics
- Electrical insulation
- Military
- Medical
- Heat pipe assemblies
- Electronic modules for power devices/supplies

**ThermaCool TC100 - Properties**

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Property	Test Method	Value or Rating
Color	Visual	Light blue
Thickness, nominal: in.	ASTM D374	.025, .032, .062
Thermal Conductivity: W/mK	ASTM E1530	1.3
Thermal Impedance: °C in. <sup>2</sup> /W (1/16")	ASTM E1530	1.25
Break Strength: psi	ASTM D412	250
Elongation: %	ASTM D412	200
Hardness: Shore A	ASTM D2240	65
Dielectric Strength: volts/mil	ASTM D149	> 250
Volume Resistivity: ohm-cm	ASTM D257	5x10 <sup>15</sup>
Operating Temperature: °F	—	-80 to 400
UL Listing Recognition	UL94	HB

**Important Instructions**

Because **Saint-Gobain** cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use.

**Shelf Life**

10 years after the date of manufacture when stored in original packaging at temperatures up to 95° (35°C) and 70% relative humidity.



**IMPORTANT:** It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain Performance Plastics assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated.

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