

# TC100U

## Gap Filler

### Thermal Interface Materials

Saint-Gobain Performance Plastics **ThermaCool® TC100U** is an uncured (B-Stage) unsupported thermally conductive solid silicone rubber. This material offers thermal conductivity along with electrical isolation for heat transfer applications bonding PC Boards and Heat Sinks. TC100U also acts as a stress relief interface when cured.

#### Physical Properties (Obtained for cured material)

Property	Test Method	TC100U
Color	Visual	White
Thickness, nominal (inch)	ASTM D374	.015, .032, .062
Thermal Conductivity (W/mK)	ASTM E1530	1.3
Thermal Impedance (°C in. <sup>2</sup> /W) (15 mils)	ASTM E1530	0.45
Break Strength (psi)	ASTM D412	200
Elongation (%)	ASTM D412	350
Hardness (Shore A)	ASTM D2240	65
Dielectric Strength (volts/mil)	ASTM D149	250
Operating Temperature (°F)	—	-80 to 400

#### Typical Cure Cycle

Temperature	Time	Temperature	Time
85°C	7–20 Minutes	105°C	2.0–4.0 Minutes
90°C	5–15 Minutes	110°C	1.5–3.5 Minutes
95°C	3–7 Minutes	120°C	1.5–3.0 Minutes

All properties are typical values and should not be used for writing specifications.

#### Recommended Uses

TC100U is offered to fill the needs of an unsupported thermal transfer material in applications requiring clean release, enhanced thermal performance by filling air gaps and electrical isolation.

#### Availability

ThermaCool® TC100U is available in 18" wide continuous yard goods.

Standard thickness include .015 .032,.062. Other thicknesses can be manufactured with minimum requirements, please contact customer support for special thickness requirements.

**Note:** Application may require surface priming for adhesion. Please contact customer services.

**Limited Warranty:** For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s). SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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#### Features/Benefits

- Uniquely formulated to cure in place
- Can be repositioned prior to curing
- Uncured material can be die cut

#### Applications

- Electronic Modules for Power Devices for Power Supplies
- Computers
- Telecommunication
- Automotive Electronics
- Electrical Insulation
- Military
- Medical
- Heat Pipe Assemblies
- CD ROM Cooling

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 AFF-1282-PDF-0306-SGCS