

# TR3 & TR5

## Thermally Conductive Pressure Sensitive Transfer Adhesives

Saint-Gobain Performance Plastics **ThermaCool® TR3** and **TR5** are a unique series of thermally conductive pressure sensitive acrylic transfer adhesives. These adhesives are supplied with release liners on both sides for ease of converting. These materials allow an easy method to provide an adhesive layer to gap filler silicone materials and thermally conductive fabrics that are not supplied with integral adhesive. These materials can also be used in place of mechanical fasteners to bond heat sinks to components.

### Physical Properties

Property	Test Method	TR3	TR5
Thickness (mils)	ASTM D1000	3.0	5.0
Thermal Conductivity (W/mK)	ASTM E1530	0.4	0.4
Thermal Impedance (°C in <sup>2</sup> /W)	ASTM E1530 @ 10 psi	0.3	0.5
Dielectric Strength	ASTM D1000	N/A	N/A
Adhesion to Steel (oz./in.)	ASTM D1000	30	60
Adhesion to Liner (oz./in.)	ASTM D1000	Easy Release	Easy Release
Operating Temperature Range (°F)	—	-20 to 300	-20 to 300

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

### Recommended Uses

Thermally conductive transfer adhesive can be applied to a wide range of materials to provide bonding between parts or to provide an adhesive layer to thermal fabrics or gap fillers that do not have a pressure sensitive adhesive applied.

### Availability

Available as yard goods up to 40" wide.

### Features/Benefits

- Thermally conductive transfer adhesive provides ability to customize parts in the field
- Compliant conductive adhesive minimizes effects of surface roughness and improves thermal performance
- Adhesive formulation is designed to exhibit excellent thermal properties at application pressures as low as 10 psi
- Specifically formulated adhesive allows parts to be reworked without damage to sensitive components
- High peel strength adhesion to minimize air entrapment

### Applications

- Custom application of adhesives to gap fillers or thermally conductive fabrics
- Replacement of mechanical fasteners
- Pressure-sensitive adhesive tape can be pre-applied to a heat sink to minimize assembly costs
- Adheres to various surfaces to create a pressure sensitive laminate material



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