

## ThermaCool® TR3/TR5

### Thermally Conductive Pressure Sensitive Adhesive

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.

#### 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 69kPa
- Specifically formulated adhesive allows parts to be reworked without damage to sensitive components
- High peel strength adhesion to minimize air entrapment

#### Typical Properties

Property	TR3	TR5	Test Method
<b>Thickness</b> mm (in.)	0.076 (0.003)	0.127 (0.005)	ASTM D1000
<b>Thermal Conductivity</b> Wm <sup>-1</sup> K <sup>-1</sup>	4.0	4.0	ASTM E1530
<b>Thermal Impedance @ 10 psi</b> °C in. <sup>2</sup> /W	0.10	0.10	ASTM E1530
<b>Adhesion to Aluminum</b> N/cm (oz./in.)	3.3 (30)	6.6 (60)	ASTM D1000
<b>Adhesion to Liner</b> N/cm (oz./in.)	Easy Release	Easy Release	ASTM D1000
<b>Operating Temperature</b> °C	-29 to +149	-29 to +149	—

**Applications**—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, for example:

- 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

**Availability**—Supplied as continuous rolls up to 1016mm wide.

Saint-Gobain Performance Plastics sales, fabrication and distribution facilities are situated at the following locations:

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