



# TGPK27B

## T-Stick Blue - Phase Change Thermal Stick

Version 2.130218

**T-Stick Blue - Phase Change Thermal Stick** (also available in pink, see TGPK27P)  
 TGPK27B is a light blue coloured, thermally conductive phase change (PCM) material. It is a solid at room temperature but changes phase at 55°C which allows it to wet surfaces. TGPK27B is supplied in an easy to use format so that it can be manually applied to a wide range of surfaces. The unique formulation gives an exceptionally low thermal resistance for heat transfer in the most demanding of applications.

### Features

- Designed to maximize heat sink performance and improve component reliability
- Displaces entrapped air between power-dissipating electronic components
- Bond Line Thickness (BLT) of 0.0254mm
- Practically no thermal contact resistance due to a very small thermal resistance path
- Solid at room temperature for ease of application
- Consistently and cleanly applied as dry pads to a heat sink or component surface
- Resistant to dry out and pump out

### Applications

Dissipation of heat in electronic devices is a critical and ever growing need as circuit board power densities continue to rise. To address this need, this product can be easily and cleanly applied in a wide variety of electronics thermal interface material requirements where the heatsink is being attached with hardware. With a very thin bondline of down to 0.0254mm, it is able to reduce the overall thermal resistance from the component to the heatsink. This keeps the components cooler which allows the electrical device to perform better. TGPK27B is not be used as an electrically insulative product.

### Properties

- ✓ REACH Compliant
- ✓ ROHS Compliant

| Property              | TGPK27B      | Unit  | Tolerance | Test Method |
|-----------------------|--------------|-------|-----------|-------------|
| Binder                | Paraffin wax | -     | -         | -           |
| Colour                | Light blue   | -     | -         | Visual      |
| Specific Gravity      | 1.4          | -     | -         | ASTM D792   |
| Thermal Conductivity  | 1.0          | W/mK  | -         | ASTM D5470  |
| Melting point         | 52           | °C    | -         | ASTM D127   |
| Operating temperature | -40 to 200   | °C    | -         | -           |
| Shelf life            | 5            | years | -         | -           |

### Part Number Information

| Product | Colour     | Packaging | Weight |
|---------|------------|-----------|--------|
| TGPK27B | Light blue | Tube      | 27g    |

| Product | Colour     | Packaging | Weight |
|---------|------------|-----------|--------|
| TGPK27P | Light pink | Tube      | 27g    |

\* All measurements in g

\* Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.

T-Global Technology Limited  
 1 & 2 Cosford Business Park, Central Park,  
 Lutterworth, Leicestershire LE17 4QU U.K.

Tel: +44 (0)1455 553 510  
 Email: sales@tglobaltechnology.com  
 Web: www.tglobaltechnology.com  
 Skype: tglobal.technology  
 VAT #: GB 116 662 714

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