



DUPONT™ TEMPRION™ TG0530

NON-SILICONE THERMAL GREASE

DESCRIPTION

DuPont™ Temprion™ TG0530 is a non-silicone thermal grease offering the highest thermal conductivity of our Temprion™ thermal greases. The silicone-free formulation of Temprion™ TG0530 exhibits excellent resistance to pump out, outgassing, and phase separation while eliminating concerns of silicone deposition on optics and electronics within any package.

Temprion™ TG0530 is highly resistant to degradation during thermal cycling and exhibits thixotropic behavior to allow for easy spreading and use in thin film applications.

APPLICATIONS

- Thermal interface material
- Heat sink compound
- CPU/GPU
- IGBT
- LED

FEATURES

- Low thermal resistance
- High thermal stability with limited:
 - Pump out
 - Outgassing
 - Phase separation
- Compatible with polymer and metal substrates
- Non-flammable

Table 1 – Typical Properties of DuPont™ Temprion™ TG0530

Property	TG0530	Test Method
Thermal Conductivity, W/m•K	4.2	ASTM D5470
Thermal Resistance, °C•cm ² /W (°C•in ² /W) @ 1 MPa (145 psi)	0.08 (0.012)	ASTM D5470
Viscosity @ 20 s ⁻¹ and 25 °C, cP	300,000	ASTM D445
Specific Gravity @ 25 °C, g/cm ³	2.8	ASTM D1475
Bleed, 24 h @ 200 °C, wt%	0.2	FTM321
Evaporation, 24 h @ 200 °C, wt%	0.5	FTM321
Dielectric Strength, kV/mm (kV/mil)	13.8 (0.35)	ASTM D149
Dielectric Constant, @ 1 MHz	4.9	ASTM D150
Volume Resistivity, Ω•cm	> 7 x 10 ¹³	ASTM D257
Flammability	Non-flammable	DuPont Method
RoHS Compliant	Yes	N/A

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102-4.

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