

TGP 100 Reactive Thermal Grease Product Datasheet

Enhance Reliability
High thermal conductivity
Low Cost Ownership

Description

TGP 100 series thermal conductive adhesives are reactive thermal grease products, have very thin BLT and can eliminate micro-bubbles at the rough interface when applied. In the service time, it can be cured to form thermal gel or thermal pad with performance of thermal phase change. TGP 100 has combined the advantages of thermal grease, thermal gel, thermal pad and thermal phase materials with elimination of disadvantages of these thermal materials. TGP 100 has low cost ownership, higher thermal conductivity and excellent reworkability. It has overcome “pump out” of thermal grease, and high cost of thermal gel, thermal pad and phase change materials. It can be used as interface materials for LED, Laptop, Desktop and other high power devices.

Typical Physical Properties

Product Name	TGP 100 series thermal conductive adhesives
PROPERTIES OF UNCURED MATERIAL	
Filler	BN
Resin Type	Epoxy
Specific Gravity (ASTM D 1475-60)	1.8-2.0 g/cc
Viscosity (Brookfield, 0.5 rpm)	20 – 50 kcp
PROPERTIES OF CURED MATERIAL	
Tensile Strength (Mpa)	16

C.T. E (ASTM E 831), PPM /°C	30
Young's modulus (GPa)	12
Thermal conductivity (W/mK)	10 - 20
Extractable ions (MIL-STD-883E)	
Na+	<5ppm
K+	<5ppm
F-	<5ppm
Cl-	<10ppm

Recommended Curing Conditions

5 min at 150 °C.

Note: 5 min curing time not including the time to allow the bond location to reach the desired cure temperature. Alternate cure profiles may be evaluated.

Storage & Shelf Life

6 months provided materials are kept in a sealed original container at room temperature. Storage beyond this period can produce higher viscosity. Protect from moisture, evaporation and foreign materials. Process ability of these products can be adversely affected by evaporation and contamination.

Safety

TGP 100 is a friendly, non-toxic material. However, general hygiene practice is recommended when handling this material. For detailed information please consult our SDS.

Package

TGP 100 solder adhesives are available in 10cc and 30cc. Other packages are available depending upon customer's request. Contact YINCAE for order information.