# **Thermal Compound 52160**

# Silicone-Free Thermal Interface Material



Thermal compound can be packaged in any size Nordson EFD syringe or cartridge along with 6 oz jars, 1 gallon pails, and 5 gallon pails.

# The Non-Silicone Advantage

The no-creep feature extends circuit life by protecting components longer and eliminating premature failures caused by migrating fluid. Silicone-based compounds have an undesirable tendency to physically migrate and contaminate nearby components. This contamination can interfere with circuit operation long after hardware installation to cause unexpected and often inaccessible problems.

Thermal Compound 52160 synthetic non-silicone thermal grease is easy to spread with metal particle fillers. It has both high thermal conductivity and low thermal resistance. The material has no bleed, phase separation, or migration under typical applications and will survive temperatures up to 200° C for short periods.

## **Features**

- Metallic filler
- Low thermal resistance
- Thin bond line
- Excellent humidity resistance

#### **Benefits**

- Easy to apply and clean
- Non-hazardous

## **Typical Applications**

- CPU/GPU heat sink
- Power Semiconductors
- LEDs





## **Typical Properties**

Characteristic	Conditions	Typical Value	Test Method
Specific Gravity	25° C	2.6	ASTM D-70
Bleed	200° C, 24 hrs	0.3%	FTM-321 Modified
Outgassing	150° C, 24 hrs	0.5%	FTM-321 Modified
Thermal Conductivity	36° C	2 W/m-K	ASTM D 5470-06
Dielectric Strength	0.05 in gap	Not Applicable	ASTM D 5470-06
Dielectric Constant	25° C, 1000Hz	Not Applicable	ASTM D-150
Dissipation Factor	25° C, 1000Hz	Not Applicable	ASTM D-150
Electrical Resistivity		over current	ASTM D-257
Operating Temperature		-40 to 200° C	
Bond Line (min)		0.0254 mm / 1 mil	
Bond Line (max)		0.127 mm / 5 mil	
Flow Rate		3 to 8 g/min	30cc syringe barrel, 16 ga tapered tip, 50 psi
Viscosity	1 sec-1, 25° C	230 kCps	Ares G-2 Rheometer
	1 sec-1, 50° C	170 kCps	
Appearance		Smooth, gray paste	
Shelf Life		1 Year	



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com

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