

Thermal Compound 52022

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 52022 synthetic non-silicone thermal grease solves the problems of contamination and migration associated with silicone-based products. The compound is a unique synthetic-based thermal grease used to ensure quick, efficient heat transfer and dissipation.

The primary advantage of this non-silicone product is long-term material stability. This means that the compound stays put and on the job over the full operable life of your hardware, exhibiting minimal bleed or evaporation over a wide operating temperature range — even in a vacuum atmosphere (10-5 tor/mil, 24 hrs @ 100° C). The compound will not leach, dry, harden, or melt in normal industrial use.

Features

- Non-metallic filler
- Minimal outgassing and bleed

Benefits

- Meets KS 21343 and Military Specification MIL-C-47113B
- Will not dry, harden, or melt in normal use
- Non-hazardous

Typical Applications

- Mounting Semiconductor devices, power transistors, resistors, and diodes
- Coupling heat generating assemblies to chassis
- Heat transfer medium on lighting ballasts
- Thermocouple wells



more info



Typical Properties

Characteristic	Conditions	Typical Value	Test Method
Specific Gravity	25° C	2.7	ASTM D-70
Bleed	200° C, 24 hrs	0.1%	FTM-321 Modified
Outgassing	150° C, 24 hrs	<0.2	FTM-321 Modified
Thermal Conductivity	36° C	0.92 W/m-K	ASTM D 5470-06
Dielectric Strength	0.05 in gap	305 V/mil	ASTM D 5470-06
Dielectric Constant	25° C, 1000Hz	4.5	ASTM D-150
Dissipation Factor	25° C, 1000Hz	0.0029	ASTM D-150
Electrical Resistivity		1.65x10 ¹⁴ ohm-cm	ASTM D-257
Operating Temperature		-40 to 200° C	
Bond Line (min)		0.0381 mm / 1.5 mil	
Bond Line (max)		0.127 mm / 5 mil	
Flow Rate		4 to 6.5 g/min	30cc syringe barrel, 16 ga tapered tip, 50 psi
Viscosity	1 sec-1, 25° C	460 kCps	Ares G-2 Rheometer
	1 sec-1, 50° C	400 kCps	
Appearance		Smooth, off-white 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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