

## PRODUCT SPECIFICATIONS SHEET

**CAT NO.      PRODUCT NAME**

10-8118            Type 44 Non-Silicone  
 10-8120  
 10-8126

**DESCRIPTION:**

Type 44 Heat Sink Compound is a non-silicone based, grease-like material specially blended with thermally conductive fine metal oxide powders. Compounded from 100% synthetic base stocks, it is designed as an alternative to silicone type heat sink compounds. This material features outstanding heat transfer efficiency, viscosity, high dielectric strength and thermal stability. Diodes, power resistors, semiconductors, and transistors. MIL-C-47113 Type 2.

**APPLICATION:**

Commonly used at the junction between a heat producing electrical device and the cooling medium, Type 44 Heat Sink Compound facilitates the transfer and removal of the damaging heat. The compound clings to all metal surfaces and will not melt, bleed or harden over time. This product can be used anywhere a silicone heat sink is used without the fear of silicone fluid migration (no creep feature).

**TYPICAL PROPERTIES:**

<u>Property</u>	<u>Test Method</u>	<u>Condition</u>	<u>Result</u>
Appearance			Off-White, Smooth Paste
Worked Penetration <b>Consistency</b>	ASTM D-217	60 Strokes, 77°F	320
Specific Gravity	<b>ASTM D-70</b>	25°C/25°C	2.7
Bleed, %/Wt	FTM-321 Modified	24 hrs @ 200°C	0.1
Evaporation, %/Wt	FTM-321 Modified	24 hrs @ 200°C	0.6
Temperature Range, (°C)			(-40 to 200)°C
<b>Flow Rate grams/min.</b>			<b>4 to 6.5</b>
Thermal Conductivity W/m - °K	<b>ASTM D 5470-06</b>	36°C @ 1 sec	0.92
Dielectric Strength, volts/mil	ASTM D-149	0.050" gap	305
Dielectric Constant, 25°C	ASTM D-150	1,000 Hz	4.5
Dissipation Factor, 25°C	ASTM D-150	1000 Hz	0.0029
Volume Resistivity, ohm-cm	ASTM D-257	RT	1.65 x 10 <sup>14</sup>

**HOW TO USE:**

Type 44 can be applied by various methods including automated pumping systems, by hand, by brushing, or by wiping. Type 44 can be applied by spraying or dipping by lowering the consistency of the product by diluting the compound with solvents such as mineral spirits, xylene, methyl ethyl ketone, toluene, and chlorinated ethanes.

**SHELF LIFE: 5 years (Un-opened)**