



## TECHNICAL DATA SHEET

### Product Description

**AOS Non-Silicone HTC 80 (High Thermal Conductivity) Heat Sink Compound** has been designed for low bond line performance in a non-silicone and **non-metal** filled thermal grease.

- AOS 52050 is formulated with organic renewable “green” fluid technology; the product will never phase separate and resists pump out. Although a highly filled system, 52050 will easily spread into a thin film
- As with our entire line of Heat Sink Compounds, the AOS technical staff can modify **AOS Non-Silicone HTC** to meet your exacting specifications.

### The Non-Silicone Advantage

Silicone-based compounds have an undesirable tendency to physically migrate and contaminate components nearby. This interferes with circuit operation long after hardware installation to cause unexpected, untimely and often inaccessible problems. The AOS Heat Sink Compound’s *no creep* feature extends circuit life by protecting components longer and by eliminating premature failure of adjacent components caused by migrating silicone base fluid.

\*Customers are responsible for testing AOS Thermal Compounds materials for their proposed use. Any information furnished by AOS Thermal Compounds and its agents is believed to be reliable, but AOS Thermal Compounds does not guarantee the results to be accurate and makes no warranties as to the fitness, merchantability, or suitability of any AOS material or product for any specific or general use and shall not be held liable for incidental or consequential damages of any kind. (040206)

### Typical Properties

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
<b>Specific Gravity</b> , @ 25°C	2.6	ASTM D-70
<b>Bleed</b> , @ 200°C, 24 Hrs., %/Wt	0.01 %	FTM-321 MODIFIED
<b>Viscosity</b> , 1 sec <sup>-1</sup> , 25°C	350,000 cP	ARES G-2 RHEOMETER
<b>Evaporation</b> , @ 200°C, 24 Hrs., %/Wt.	0.1 %	FTM-321 MODIFIED
<b>Thermal Conductivity</b> , @ 36°C	3.8 W/m-K	ASTMD 5470-06
<b>Thermal Resistance</b> , @ 50°C	0.0671 °C/W	Oracle TTV Model 270-7806-01
<b>Electrical Properties</b>		
Dielectric strength, 0.05” gap, V/mil	351	ASTM D-149
Dielectric constant, 25°C @ 1,000 Hz	4.92	ASTM D-150
Dissipation factor, 25°C @ 1,000 Hz	0.0032	ASTM D-150
Volume Resistivity, ohm-cm	1.0 x 10 <sup>13</sup>	ASTM D-257
<b>Operating Temperature Range</b>	-40°C to 200°C	
<b>Flow Rate</b>	1 to 3 g/min	AOS Method
<b>Appearance</b>	Dark Gray Paste	
<b>Shelf Life</b>	5 Years	