

TECHNICAL DATA SHEET



Product Description

52070 is our highest conductivity, non-silicone, thixotropic thermal grease. (For a non-silicone, low BLT material, without metal particles see **52050**) The material will never bleed, phase separate or pump out under typical applications, and will survive temperatures up to 200°C for brief periods.

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.

Product Features & Benefits

52070 has no special storage requirements, has no volatile content, is non-reactive, and has excellent humidity resistance and high thermal stability.

As with our entire line of Heat Sink Compounds, the AOS technical staff can modify **52070** to meet your requirements.

52070 is available in syringes, cartridges, jars, and bulk packaging.

Typical Properties

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Specific Gravity, @ 25°C	2.3	ASTM D-70
Bleed, @ 200°C, 24 Hrs., %/Wt	0.3 %	FTM-321 MODIFIED
Viscosity, 1 sec⁻¹, 25°C/50°C	1,000,000/700,000 cP	ARES RHEOMETER
Evaporation, @ 200°C, 24 Hrs., %/Wt.	0.5 %	FTM-321 MODIFIED
Thermal Conductivity, @ 36°C	7.4 W/m-K	ASTMD 5470-06
Thermal Resistance, @ 50°C	0.085 °C/W	Oracle TTV Model 270-7806-01
Anticipated Minimum Bond Line	0.5 mils	Determined @ 1, 2, 5 and 20 mil thicknesses
Based on filler dimensions	< 1	
Operating Temperature Range	-55°C to 200°C	
Flow Rate	0.5 to 1.5 g/min	AOS Method
Appearance	Stiff, Dark Gray Paste	
Shelf Life	5 Years	

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)