AOS NON-SILICONE HTC

Product Code: 52056

TECHNICAL DATA SHEET

Product Description

AOS Non-Silicone Heat Sink Compound is a synthetic-based thermal grease used to insure quick, efficient heat transfer and dissipation. The product exhibits very high thixotropy yet spreads easily under low shear. This AOS compound increases slightly in viscosity as it is heated, yet still exhibits excellent heat transfer. 52056 was developed by AOS in response for a product that will exhibit very high flow initially and can therefore be pumped under relatively low shear. The material appears compatible with most electronic materials. Keep the container closed until using as the material should not be left exposed to the atmosphere until used.

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

AOS Non-Silicone Heat Sink Compound retains all the unique advantages of AOS Heat Sink Compound (Product Code: 52022) with the added benefit of reduced bleed and pump out during use. It is compatible with most metal and plastic components. The product does not contribute to solder bath contamination, and has very low bleed and evaporation. It has a 1-year minimum shelf life in its unopened container. Additional benefits include excellent thermal conductivity and thermal resistance over a wide operating temperature range.

AOS Non-Silicone Heat Sink Compound is cost effective. The product has greater thermal conductivity than our standard non-silicone thermal grease, but remains comparable in cost.

As with our entire line of AOS Heat Sink Compounds, our technical staff can modify **AOS Non-Silicone Heat Sink Compound** to meet your exacting specifications.

Typical Properties

Property	Value	Test Method
Specific Gravity, @ 25°C	2.7	ASTM D-70
Bleed, @ 200°C, 24 Hrs., %/Wt	0.3	ASTM 6814
Viscosity, 1 sec^{-1}, cPs	700,000	Rheometer
Evaporation, @ 150°C, 24 Hrs., %/Wt.	NA	ASTM 6814
Thermal Conductivity, @ 25°C, W/m-K	2.7	ASTMD 5470-17
Electrical Properties		
Dielectric strength, 0.05" gap, V/mil	305	ASTM D-149
Dielectric Strength after exposure to 85°C/85% R.H. for 48 hours	212	
Dielectric constant, 25°C @ 1,000 Hz	5.0	ASTM D-150
Dissipation factor, 25°C @ 1,000 Hz	0.0027	ASTM D-150
Volume Resistivity, ohm-cm	2.15×10^{15}	ASTM D-257
Operating Temperature Range, °C	-40 to 150	
Flow Rate, g/min	2 to 5	AOS Method*
Appearance	Smooth, Gray Paste	
Shelf Life	5 Years	

*30cc Syringe, 0.08"orifice at 50 PSI, at 25°C

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