



AOS NON-SILICONE XT-3

Product Code: 52039

TECHNICAL DATA SHEET



Product Description

AOS Non-Silicone XT-3 Heat Sink Compound is recommended for high-temperature heat transfer in silicone sensitive applications where out gassing is the main concern. Non-Silicone XT-3 is a non-silicone, thermally conductive white paste/grease, compounded with 100% synthetic base stocks. The product offers high thermal conductivity and virtually no bleed, evaporation and no out gassing over a wide operating temperature range.

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

Stable at continuous operating temperatures up to 250°C with all the unique advantages of our standard non-silicone heat sink compound, including no creep, bleed, migration or contamination. Nonflammable, oxidation resistant, and does not promote rust or corrosion. Excellent thermal resistance and high thermal conductivity; efficient thermal coupler; effective heat sink sealer and heat transfer agent. Five-year minimum shelf life. Compatible with rubber and plastic.

Major Applications

While suitable for traditional applications requiring a non-silicone thermal grease, Non-Silicone XT-3 is especially appropriate when out gassing is a concern and there is an intentional heat source that requires continuous operation at temperatures exceeding 200°C.

Typical Properties

Property	Value	Test Method	
Specific Gravity, @ 25°C	2.4	ASTM D-70	
Bleed, @ 200°C, 24 Hrs., %/Wt	0.0 %	FTM-321 MODIFIED	
Viscosity, 1 sec ⁻¹ , 25°C/50°C	N/A	ARES G-2 RHEOMETER	
Evaporation, @ 200°C, 24 Hrs., %/Wt.	0.5 %	FTM-321 MODIFIED	
Out Gassing	%TML %VCM	0.36 0.09	ASTM E-595
Thermal Conductivity, @ 36°C	0.70 W/m-K	ASTMD 5470-06	
Thermal Resistance, @ 50°C	0.2 °C/W	Oracle TTY Model 270-7806-01	
Electrical Properties			
Dielectric strength, 0.05" gap, V/mil	353	ASTM D-149	
Dielectric constant, 25°C @ 1,000 Hz	4.86	ASTM D-150	
Dissipation factor, 25°C @ 1,000 Hz	0.0019	ASTM D-150	
Volume Resistivity, ohm-cm	7.28 x 10 ¹³	ASTM D-257	
Operating Temperature Range	-20°C to 250°C		
Flow Rate	2 to 5 g/min	AOS Method	
Appearance	Off-White 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)

Tel. (732)389-5514 22 Meridian Road, Suite 6, Eatontown, NJ 07724 Fax (732)389-6380