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 TTV 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	7.28×10^{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	

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