

AOS NON-SILICONE XT-2 Product Code: 52030

TECHNICAL DATA SHEET



Product Description

AOS Non-Silicone XT-2 Heat Sink Compound is recommended for *high-temperature heat transfer* in silicone sensitive applications. Non-Silicone XT-2 is a non-silicone-based thermally conductive white paste/grease, compounded with 100% synthetic base stocks. The product offers high thermal conductivity and virtually no bleed or evaporation 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 275°C** with the same unique advantages of our standard nonsilicone heat sink compound. Nonflammable, oxidation resistant, and does not promote rust or corrosion. No bleed; excellent thermal resistance and high thermal conductivity; efficient thermal coupler; effective and positive heat sink sealers and heat transfer agent. 5-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-2** is especially appropriate when there is an intentional heat source, such as a heating element, calrod, etc., that requires continuous operation at temperatures exceeding 200°C.

Typical Properties

Property	<u>Value</u>	<u>Test</u> Method
Specific Gravity, @ 25°C	2.4	ASTM D-70
Bleed , @ 200°C, 24 Hrs., %/Wt	0.2 %	FTM-321 MODIFIED
Viscosity , 1 sec ⁻¹ , 25°C/50°C	460,000/250,000 cP	ARES RHEOMETER
Evaporation , @ 200°C, 24 Hrs., %/Wt.	0.5 %	FTM-321 MODIFIED
Thermal Conductivity , @ 36°C	1.5 W/m-K	ASTMD 5470-06
Thermal Resistance , @ 50°C	0.3207 °C/W	Oracle TTV Model 270- 7806-01
Electrical Properties Dielectric strength, 0.05" gap. V/mil	353	ASTM D- 149
Dielectric constant, $25^{\circ}C @ 1 000 Hz$	4.86	ASTM D-
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	-40°C to 275°C	
Flow Rate	2 to 5 g/min	AOS Method
Appearance	Off-White Paste	wicthou
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)

AOS Thermal Compounds Tel. (732)389-5514 22 Meridian Road, Suite 6, Eatontown, NJ 07724 Fax (732)389-6380 02/01/18