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Alphacool Apex Thermal Putty X1 50g

Alphacool article number: 14945



Quick Info

The Alphacool Apex Thermal Putty is a high-performance solution for efficiently transferring heat from heat-sensitive electronic components to a cooler. As a non-hardening silicone gel, it offers an electrically non-conductive alternative to conventional thermal pads and is designed for applications where flexibility, low mechanical stress, and high thermal conductivity are required.

- Thermal Conductivity: 10 W/mK
- High compressiability for low stress application
- No pump-out ,no crak/slide
- Ideal for graphics card coolers

Scope of delivery

1x Alphacool Apex Thermal Putty X1 50g

Technical Data

Flow Rate (g/min)	20 (Test Method: 30cc EFD tube/ 2.5mm nozzle, 90 psi)
Density (g/cc)	3.8 (Test Method ASTM D792)
Minimum Bondline Thickness (mm)	0.2mm
Continuous Using Temperature (Degrees Celsius)	-20 ~ 125 °C
Thermal Conductivity (W/mK)	10 (Test Method ASTM D5470)
Volume Resistivity (Ohm-cm)	>/= 1.0X1013 (Test Method ASTM D257)
Dielectric Strength (KV/mm)	>/= 5 (Test Method ASTM D149)
Weight	50g
Color	Blue-Grey

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Safety data sheet	14945_Alphacool_Apex_Thermal_Putty_X1_50g_SDS.pdf
Product pictures	14945_Alphacool_Apex_Thermal_Putty_X1_50g_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_14945.pdf

Packaging dimensions per unit

L x W x H	57 x 50 x 35 mm
Weight	68 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197149457
Customs code	84733080000

Article text

The Alphacool Apex Thermal Putty is a high-performance solution for efficiently transferring heat from heat-sensitive electronic components to a cooler. As a non-hardening silicone gel, it offers an electrically non-conductive alternative to conventional thermal pads and is designed for applications where flexibility, low mechanical stress, and high thermal conductivity are required.

A key advantage of the Apex Thermal Putty lies in its optimized consistency, which ensures both ease of application and dimensional stability. Under light pressure, the material adapts precisely to different gap heights while remaining form-stable. This allows surface irregularities and tolerances between the cooler and the component to be reliably compensated, ensuring consistent and optimal contact between the heat source and the cooler. This is particularly important for modern graphics cards and other sensitive electronic components, as delicate parts such as memory chips or voltage regulators are effectively protected from mechanical damage.

The formulation of the Alphacool Apex Thermal Putty combines high thermal conductivity with a reduced bond line thickness (BLT), thereby lowering thermal resistance and improving heat dissipation. Bond line thickness refers to the thickness of the thermal interface material layer between the component and the cooler. At the same time, high vertical stability and long-term stable material properties ensure lasting material integrity without sagging, cracking, or contamination of surrounding components, making the product ideal for professional applications.

Thanks to these characteristics, the Alphacool Apex Thermal Putty offers a wide range of applications. Wherever reliable, flexible, and mechanically gentle thermal transfer is required, Apex Putty provides a powerful solution.