



GET AE 100

Technical Data Sheet



Product Description

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Danish Graphene introduces the Graphene-Enhanced Thermal (GET) adhesive, a breakthrough in thermal management designed specifically for space applications. This innovative, entirely metal-free thermal interface solution redefines performance standards with its ultra-lightweight, low-density formula. The GET adhesive features an exceptionally thin bond line thickness and minimal thermal resistance, paired with outstanding heat dissipation capabilities. These attributes enable more stable operating conditions for critical components while significantly reducing the risk of overheating and thermal hotspots.

The easy-to-use evaluation kit allows for straightforward testing in existing systems, making it simple to experience the cutting-edge potential of thermal management for space. Experience the future of thermal management in space with the GET adhesive.

Product Features

- High thermal conductivity
- Low density
- Low outgassing
- No metal particles
- Great bond strength
- Low filler concentration

Typical Applications

- Electronic component heat transfer
- Gap-filler in multipart components
- Avoidance of heat islands
- Electronic telecommunication and aerospace

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Properties

Thermal conductivity at RT	1.0 W · m ⁻¹ · K ⁻¹
Lap Shear strength (cohesive)	29 MPa
Colour	Black
Surface Resistivity	>1 · 10 ⁸ Ω□
Operating temperature range (peak)	-100 °C to +140 °C
Coefficient of thermal expansion (<Tg >Tg)	48.8 133.5 ppm/K

Outgassing Performance ECSS-Q-ST-70-02

	Cured at 60°C for 2 hours	Cured at RT for 72 hours
CVCM	<0.01 % ± 0.00 %	0.02 % ± 0.02 %
TML	1.11 % ± 0.01 %	1.26 % ± 0.04 %
RML	0.70 % ± 0.04 %	0.84 % ± 0.09 %

Surface Preparation

Surfaces should be cleaned and polished if rough prior to applying the adhesive. This is best done by using acetone, isopropanol, or a similar suitable solvent. The suitability depends on the surface. If the surface is oxidized it might be beneficial for the heat distribution to gently remove it with abrasive paper.

Curing Properties

Mix ratio (resin:hardener)	2.8:1 by volume 3.01:1 by weight
Handling time at 23°C	5-9 hours
Working strength	23°C: 30 hours 60°C: 1.5 hours
Full cure	23°C: 72 hours 60°C: 2 hours

