



Technical Data Sheet

ALT-416-90

Overview ALT-416-90 is an elastomeric polymer with liquid metal suspension that offers exceptional thermal conductivity and adhesion after curing.

Main characteristics:

- Elastomeric solid
- Delivered in dispensing syringes (3 ml to 70 ml)
- High adhesion and heat transfer properties

Applications:

- Chip-to-heatsink thermal interface material
- Power module thermal interface material

Cure Conditions	Nominal Value	SI Units
Temperature	150	°C
Time	10	min

Storage		
Temperature	-30	°C
Shelf-Life	180	Days

Thermal Properties		
R _{th} @ BLT = 30µm	11±1	mm ² ·K/W
R _{th} @ BLT = 20µm	6.7±1	
Liquid Metal T _m	-50	°C
Weight Loss 175C, 60 min	<0.05	wt%

Mechanical Properties		
Elongation at Break	225	% Strain
Elastic Modulus	440	kPa
Lap Shear Strength	360	kPa
Shore Hardness (Type OO)	65	

Viscosity		
Zero shear viscosity (η ₀)	960	Pa·s
Viscosity @ 10 rad/s	150	Pa·s

Reliability		
HAST (130 °C/85% RH)	96	hours
TST		cycles

Microscopy		
Average liquid metal particle size	50	microns

Augerability	
	Yes

Color	
	Grey