

Hybrid Filler

Hybrid Filler Lineup

Item	Unit	Under Development	Small Particle	Large Particle
		Ultra-Fine Particle Type		
Illustrative image	-	Ideal for adhesives and grease applications. 		
Thickness	μm	20 ~ 50	100~200	500~1000
Thermal Conductivity	W/m · K	2.0 ~ 3.0	4.5	15
Filler Loading	vol%	40 ~ 60	60	80
AlN Spherical Filler	μm	D90:TBD	D90:60	D90:180
Thermalnite® Fiber diameter	μm	D50:5	D50:5	D50:5
Thermalnite® Fiber length	μm	D50:20	D50:20	D50:20

※ These are measured values, not product specification values.

Key Benefits of Adoption

Contact us
for consultation

Achieve high
thermal conductivity
with low
filler loading

Challenge

Need to optimize filler design
▶ Reduce resin flow defects & TAT

Challenge

Need to improve thermal conductivity
▶ Achieve 15 W/m·K even at high loading

Challenge

Need adhesive strength & workability
▶ Maintain base resin properties
at high loading

Applications

Gap Fillers



TIM Sheets



Adhesives



Greases



Phase Change Materials



High Viscosity Materials

