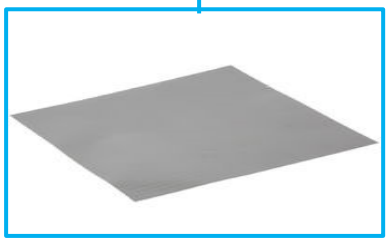
Phase change

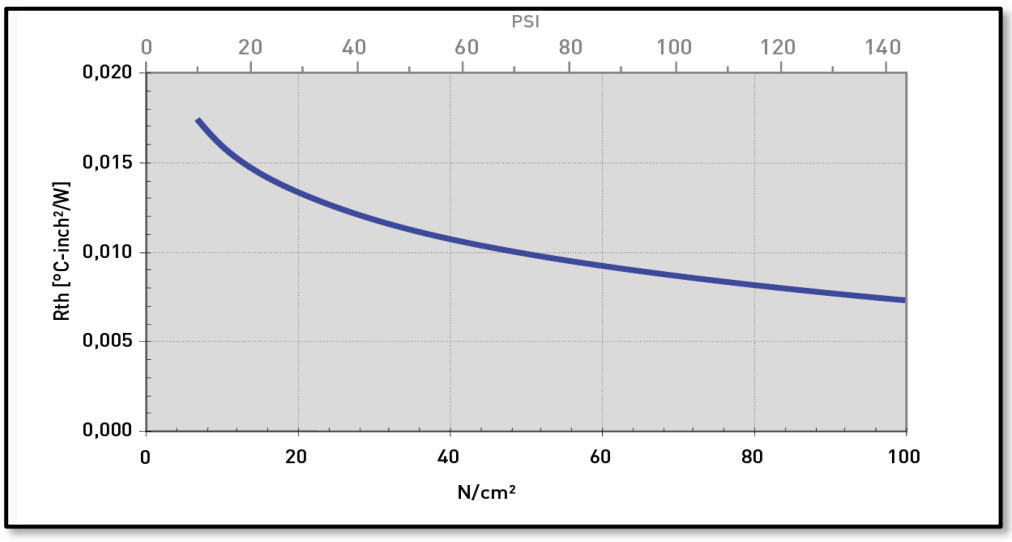


Our Thermal Foams, also known as TPC, are phase-changing thermo-conductive materials that solve heat dissipation problems. The TPC_W_PC_E is a thermally conductive thixotropic phase change compound optimizing the thermal path, where a low cooling requirement is required. Indeed, it is an excellent thermal conductor of 3.5W/ mK, and has a good thermal resistance thus facilitating heat transfer and does not have electrical insulation. We can cut according to customer plan. All our mattresses are certified UL 94 in V0.

Application areas: Electronic components - Electric vehicles, 5G, Automatic control system, Mobile phone, AIOT, HPC (High Performance Computing), Server, IC, CPU, MOS, LED motherboard, Power supply, Heat sink, LCD-TV, Laptop, PC, Telecommunication device, Wireless hub, DDR module ll, etc.

Technical characteristics

Fetures	Unit	TPC_W_PC_E	
Specific gravity Dried or not	g/cm3	1.8 @ RT / 1.7 @ RT	
Reinforcement	-	Dryable Phase Change Compound	
Color	-	Gray	
Viscosity dried @ 10 rpm	pas	60 @ 60°C / 42 @ 80°C / 25 @ 100°C / 18 @ 120°C	
Viscosity not dried @ 10 rpm		96 @ RT	
Resistance @150Psi	°C-inch²/W	0.007	
Resistance @30 Psi		0.013	
Resistance @10 Psi		0.017	
Thermal Conductivity	W/mK	3.5	
Drying temperature in mm	Temps	@ 60°C 3.5h (0.05mm)	@ 125°C 8min (0.05mm)
		@ 60°C 8h (0.15mm)	@ 125°C 15min (0.15mm)
		@ 60°C 13h (0.25mm)	@ 125°C 20min (0.25mm)
Working temperature	°C	< 125	



The results were obtained under laboratory conditions and should be considered only as an indication. As AB2E has no control over its customers' equipment and many other factors, it is the user's responsibility to carry out its own tests to ensure that the product corresponds to its needs.