

PROPERTIES PEEK-NAT/BLK

Legend

► This table is a valuable help in the choice of a material. The data listed here fall within the normal range of product properties.
However, they are not guaranteed and they should not be used to establish material specification limits nor used alone as the basis of design.

PROPERTIES	ITEM		Method	Unit	PEEK-NAT/BLK
			ASTM		
	Color		-	-	beige/black
	Density		D792	lbs/in ³	0.047
	Water absorption	after 24/96h immersion in water of 73°F	D570	mg	5/10
			D570	%	0.06/0.12
		at saturation in air of 73°F, 50%RH	D570	%	0.20
	at saturation in water of 73°F		D570	%	0.45
Thermal Properties	Melting Temperature		D2133	°F	640
	Thermal conductivity at 73°F		C177	Btu-in/ft ² -h-°F	1.7
	Coefficient of linear thermal expansion	average value btw 73~140°F	D696	in/in/°F	28 · 10 ⁻⁶
		average value btw 73~212°F	D696	in/in/°F	28 · 10 ⁻⁶
	Temperature of Deflection under load	method A : 264psi	D648	°F	320
	Max. allowable service temp. in air :	for short periods	-	°F	590
		continuously : 5,000/20,000h	-	°F	480
		Min. service temperature	-	°F	-
Flammability	UL94 (3/6mm thickness)	-	-	V-0/V-0	
Mechanical Properties at 73°F	Tension test	tensile stress	D638	psi	14,500
		tensile strain at break	D638	%	15/
		tensile modulus of elasticity	D638	psi	566,000
	Compression test	compressive stress at 10% nominal strain	D695	psi	20,000
	Izod impact strength-Notched		D256	ft-lbs/in	0.8
	Rockwell hardness		D785	-	R120
Electrical Properties at 73°F	Electric strength		D149	V/mil	610
	Volume resistivity		D257	Ω-cm	>10 ¹⁴
	Surface resistivity		D257	Ω	>10 ¹³