



PSR Plastics
Components to Industry

POM – NAT/BLK

Properties

Properties	Item	Method ASTM	Unit	POM-NAT/BLK
	Color	-	-	white/black
	Density	D792	lbs/in ³	0.051
	Water absorption			
			after 24/96h immersion in water of 73°F	
		D570	mg	20/37
		D570	%	0.24/0.45
			at saturation in air of 73°F, 50%RH	
		D570	%	0.20
			at saturation in water of 73°F	
		D570	%	0.85
Thermal Properties	Melting Temperature	D2133	°F	330
	Thermal conductivity at 73°F	C177	Btu-in/ft ² h·°F	2.1
	Coefficient of Linear thermal expansion			
			average value btw 73~140°F	
		D696	in/in/°F	61 · 10 ⁻⁶
			average value btw 73~212°F	
		D696	in/in/°F	69 · 10 ⁻⁶
	Temperature of Deflection under load			
			method A : 264psi	
		D648	°F	220
	Max. allowable service temp. in air :			
			for short periods	
		-	°F	285
			continuously : 5,000/20,000h	
		-	°F	240/210
			Min. service temperature	
		-	°F	-50
	Flammability			
			UL94 (3/6mm thickness)	
		-	-	HB/HB
Mechanical Properties at 73°F	Tension test			
			tensile stress	
		D638	psi	9,450
			tensile strain at break	
		D638	%	30
			tensile modulus of elasticity	
		D638	psi	450,000
	Compression test			
			compressive stress at 10% nominal strain	
		D695	psi	15,000
	Izod impact strength-Notched	D256	ft-lbs/in	0.7
	Rockwell hardness	D785	-	R115
Electrical Properties at 73°F	Electric strength	D149	V/mil	510
	Volume resistivity	D257	Ω·cm	>10 ¹⁴
	Surface resistivity	D257	Ω	>10 ¹³

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.