

PROPERTIES POM-NAT/BLK

Legend

★ : values referring to dry material

★★ : values referring to material in equilibrium with the standard atmosphere 23°C/50% RH (mostly derived from literature)

► 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	POM-NAT/BLK	
			ISO/(IEC)			
	Color		-	-	white/black	
	Density		1183	g/cm³	1.41	
	Water absorption	After 24/96h immersion in water of 23°C	62	mg	20/37	
			62	%	0.24/0.45	
		At saturation air 23°C, 50%RH	-	%	0.20	
			At saturation in water of 23°C	-	%	0.85
Thermal Properties	Melting Temperature		-	°C	165	
	Thermal conductivity at 23°C		-	W/(K·m)	0.31	
	Coefficient of inear Thermal expansion	Average value btw23~60°C	-	m/(m ·K)	110·10 ⁻⁶	
		Average value btw23~100°C	-	m/(m ·K)	125·10 ⁻⁶	
	Temperature of Deflection under load	Method A : 1.8Mpa ★	75	°C	105	
	Max. allowable Service temp. in air	For short periods	-	°C	140	
		Continuously : 5,000/20,000h	-	°C	115/100	
Min.service temperature		-	°C	-50		
Flammability		UL94 (3/6mm thickness)	-	-	HB/HB	
Mechanical Properties at 23°C	Tension test	Tensile stress ★	527	MPa	65	
		★★	527	MPa	65	
		Tensile strainat break ★	527	%	30	
		★★	527	%	30	
		Tensile modulus of elasticity ★	527	Mpa	3100	
		★★	527	MPa	3100	
	Compression test	Compressive stress at 1/2/5/% nominal strain ★	604	MPa	19/35/67	
	Izod impact strength-Notched	★	180/2A	kg·cm/cm	4.0	
		★★	180/2A	kg·cm/cm	-	
	Rockwell hardness		★	2039-2	-	R115
Electrical Properties at 23°C	Electric strength		★	(60243)	KV/mm	20
			★★	(60243)	KV/mm	20
	Volume resistivity		★	(60093)	Ω·cm	>10 ¹⁴
			★★	(60093)	Ω·cm	>10 ¹⁴
	Surface resistivity		★	(60093)	Ω	>10 ¹³
			★★	(60093)	Ω	>10 ¹³
	Relative permittivity:	100Hz	★	(60250)	-	3.8
			★★	(60250)	-	3.8
		1MHz	★	(60250)	-	3.8
			★★	(60250)	-	3.8
	Dielectric dissipation factor:	100Hz	★	(60250)	-	0.003
			★★	(60250)	-	0.003
		1MHz	★	(60250)	-	0.008
			★★	(60250)	-	0.008
	Comparative tracking index(CTI)		★	(60112)	-	600
			★★	(60112)	-	600