

Polyoxymethylene (POM), commonly known as acetal or polyacetal, is a high-performance engineering thermoplastic renowned for its exceptional stiffness, low friction, and outstanding dimensional stability.

PROPERTIES		ITEM	METHOD ISO/(IEC)	UNIT	POM
	Color		-	-	white/black
	Density		1183	g/cm <sup>3</sup>	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/(m·K)	0.31
	Coefficient of inear Thermal expansion	Average value btw23~60°C	-	10 <sup>-6</sup> /k	110
		Average value btw23~100°C	-	10 <sup>-6</sup> /k	125
	Temperature of Deflection under load	Method A : 1.8Mpa	75	°C	105
	Max. allowable Service temp. in air	For short periods	-	°C	140
		Continously : 5,000/20,000h	-	°C	115/100
	Min.service temperature		-	°C	-50
Mechanical Properties at 23°C	Flammability	UL94 (3/6mm thickness)	-	-	HB/HB
	Tension test	Tensile stress	527	MPa	62
		Tensile strainat break Tensile modulus of elasticity	527	%	30
			527	MPa	3100
	Compression test	Compressive stress at 1/2/5/% nominal strain	604	MPa	19/35/67
	Izod impact strength-Notched		180/2A	J/m	40
	Rockwell hardness		2039-2	-	R115
Electrical Properties at 23°C	Electric strength		(60243)	kV/mm	20.0
	Volume resistivity		(60293)	Ω·cm	>10 <sup>14</sup>
	Surface resistivity		(60293)	Ω	>10 <sup>13</sup>
	Relative permittivity:	100Hz	(60250)	-	3.8
		1MHz	(60250)	-	3.8
	Dielectric dissipation factor:	100Hz	(60250)	-	0.003
		1MHz	(60250)	-	0.008
	Comparative tracking index(CTI)		(60112)	-	600

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

APPLICATIONS	Small gear wheels Eyeglass frames Ball bearings Ski bindings	Fasteners Gun parts Knife handles Lock systems
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