POM datasheet

Introduction: It is a thermoplastic material with excellent fatigue resistance, creep resistance, self-lubricating performance and machining performance. It can be used at - 40 ℃ - 100 ℃.

Long term use at temperature. The test passed the regulation of polyoxymethylene copolymer (copolyformaldehyde) in Article 21, 177.2470 of FDA regulation, which can be used as food grade materials.

Features: Good mechanical strength and dimensional stability, good machinability, good surface self-lubricating performance and high surface hardness

Application: Mechanical transmission parts, precision mechanical parts, water resistant parts, electronic and electrical parts, etc.

Color: White

-	Item	Standard	unit	value
Mechanical Properties	Density	ASTM D792	g/cm3	1.43
	Tensility resistance strength	ASTM D638	Mpa	60
	Break elongation rate	ASTM D638	%	30
	Bending strength	ASTM D790	Mpa	100
	Bending modulus	ASTM D790	Mpa	2800
	Shore D hardness	ASTM D2240	D	85
	Impact strength	ASTM D256	J/M	74
Calorific Performance	Melting temperature	DSC	℃	165
	Heat deform temperature	ASTM D648	℃	130
	long term working temperature	-	℃	100
	short term working	-	℃	150
	Heat conductivity rate	DIN 52612-1	W/(K-M)	0.31
	Expansion Coefficient	ASTM D696	10-5-1/K	13
Electricity Performance	Dielectrical Strength	ASTM D150	KV-mm	19
	Dielectric loss coefficient	ASTM D150	-	0.007
	Volume Resistance	ASTM D257	Ω .cm	$10^{\wedge 14}$
	Surface Resistance	ASTM D257	Ω	$10^{\wedge 16}$
	Dielectric constant	ASTM D149	-	3.7
Chemical Properties	Equilibrium water absorption	23℃ 60% RH	%	0.22
	Acid resistance	23℃ 60% RH		+
Others	Flammability	UL 94		HB

1) The above data are tested by the professionals. To a great extent, these data can be used directly, but we can not make sure that they can be applied to any field. There will be some difference between these data and the properties of the products made from the raw material.

2) + = yes 0 = depend on - = No