Technical Data Sheet POM
Yazd polymer

Properties	POM C	PA 6	PA G	PA6 GOIL	PA 66	PA6 GF	Test method
Density	1.14	1.14	1.15	1.14	1.14	1.30	ISO.1183 DIN.53479
Water absorption	0.2	2.8	2.4	1.5	2.6	2	-
Absorption 23˚C	0.7	9.0	7.0	4.8	8.0	5.2	-
Tensile strength at break	66	54 (80)	58 (85)	50 (70)	61 (88)	100 (130)	ISO.527 DIN.53455
Elongation at break	50	180 (60)	100 (20)	120 (35)	150 (40)	20	ISO.527 DIN.53455
Tensile modulus of elasticity	2700	1700 (3000)	1900 (3400)	1700 (3100)	1900 (3200)	4000	ISO.527 DIN.53455
Compression test	14	6 (18)	7 (20)	6 (19)	7 (20)	15 (28)	ISO.899 DIN.533444
Impact strength	n.b	n.b	n.b	n.b	n.b	n.b	ISO.R179 DIN.53453
Notched impact strength chirpy	9	25 (5)	23 (5)	25 (8)	18 (5)	10	ISO.179/3C DIN.53453
Ball indentation hardness	140	80 (155)	100 (165)	80 (150)	100 (170)	170 (210)	ISO.2039.1 DIN.53456
Rockwell hardness	M88	M85	M88	M82	M89	M95	ISO.2039.2
Coefficient of friction to steel	0.30	0.42	0.42	0.34	0.42	0.50	-
Melting point	165	220	220	220	255	220	-
Thermal conductivity	0.30	0.25	0.28	0.28	0.25	0.25	DIN.52612
Deformation at temp. HDT	115	83	96	90	103	150	ISO.75 DIN.53461
Linear expansion coefficient	110	90	80	80	85	50	-
Operating temperature continuously	110	88	100	100	95	105	-
Operating temperature Short period no load	+140	+150	+160	+160	+165	+170	-
Minimum Operating temperature	-50	-40	-30	-30	-30	-30	-
Flammability UL94	HB	HB V2	HB V2	HB	HB V2	HB V2	UL94
Oxygen index	15	24	25	25	25	24	ISO.4589
Dielectric constant	3.8	7 (3.6)	7 (3.7)	7 (3.7)	7 (3.6)	7 (3.6)	ISO.250 DIN.53483
Dielectric strength	50	25	30	30	25	25	ISO.243 DIN.53481
Volume resistivity	10^{15}	10^{12}	10^{12}	10^{12}	10^{12}	10^{12}	ISO.93 DIN53482
Dissipation factor	0.01	0.06	0.05	0.05	0.06	0.06	ISO.250 DIN.53483