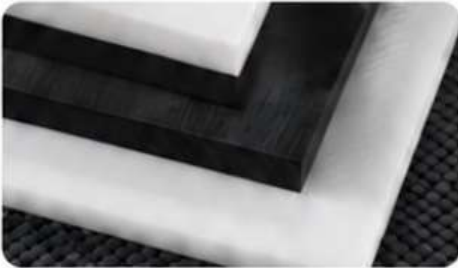


POLYACETAL (POM)

Sheets



POM Sheets & Rods are made from polyacetal which is a thermoplastic polymer, which is produced by the polymerization of formaldehyde. It is a highly crystalline thermoplastic with characteristics such as high tensile strength, stiffness, low coefficient of friction and excellent dimensional stability. Polyacetal offers resilience and creep resistance, natural lubricity and can be used under a wide temperature range. It offers a unique combination of properties not available with metals or other plastics and can be used for machining into gears, bushes and other engineering components for appliance, electronic, automotive, textile machinery and other applications.

Rods



Characteristics

- Good sliding properties
- Excellent machining results
- High mechanical strength
- Good resilience
- High strength even at low temperature

POLYACETAL (POM)

Performance and test conditions	Test Method	Unit	Typical Values
Mechanical properties			
Notched impact strenght of cantilever beam, 23 C°	ASTM D256	KJ/m ²	10
Yield tensile strenght, 23 C°, 50mm/min	ASTM D638	Mpa	60
Elongation at break, 23 C°, 50mm/min	ASTM D638	%	25
The bending strength, 23 C°, 2mm/min	ASTM 790	Map	70
Bending modulus, 23 C°, 2mm/min	ASTM 790	Map	2500
shore hardness D	ASTM D2240	-	85
The Density	ISO 1183	g/cm ³	1.42
Thermal Performance			
Thermal deformation temperature (HDT) (0.45Mpa)	ISO 75	C°	120
Melting point	-	C°	170
Long term operating temperature	-	C°	100
Short-term operating temperature	-	C°	120
Thermal conductivity	DIN 52612-1	W/(K-M)	0.33
Linear expansion coefficient	ASTM D696	10-5-1/K	13
Electrical Performance			
Dielectric strenght	ASTM D150	KV-mm	19
Dielectric loss coefficient	ASTM D150	-	0.007
The volume resistance	ASTM D257	Ω cm	10 ¹⁵
The surface resistance	ASTM D257	Ω	10 ¹⁵
Dielectric constant	ASTM D149	-	3.7