

Multiplast POM-C natural

Multiplast POM-C natural, Polyoxymethylene, is a semi-crystalline thermoplastic offering high strength and rigidity.

Multiplast POM-C natural has:

- Good chemical resistance
- High resilience
- Good sliding properties
- Good wear resistance
- Low moisture absorption
- Good level of dimensional stability
- Good fatigue strength
- Outstanding machining properties

Properties	Units		
Modulus of elasticity (tensile test)	MPa	2800	
Tensile strength	MPa	67	
Tensile strength at yield	MPa	67	
Elongation at yield	%	9	
Elongation at break	%	32	
Modulus of elasticity (flexural test)	MPa	2600	
Flexural strength	MPa	91	
Compression modulus	MPa	2300	
Compressive strength (1% / 2%)	MPa	20 / 35	
Impact strength (Charpy)	kJ / m ²	-	
Notched impact strength (Charpy)	kJ / m ²	8	
Ball indentation hardness	MPa	165	
Glass transition temperature	°C	-60	
Melting temperature	°C	166	
Service temperature	short term	°C	140
	long term	°C	100
Thermal expansion	23 °C – 60 °C	10 ⁻⁵ K ⁻¹	13
	23 °C – 100 °C	10 ⁻⁵ K ⁻¹	14
Specific heat	J / (g x K)		1,4
Thermal conductivity	W /m K		0,39

Properties	Units	
Specific surface resistance	Ω	10^{14}
Specific volume resistance	$\Omega \times \text{cm}$	10^{13}
Dielectric strength	kV / mm	49
Resistance to tracking (CTI)	V	600
Water absorption 24 h / 96 h (@ 23 °C)	%	0,05 / 0,1
Resistance to hot water / bases	-	Limited resistance
Resistance to weathering	-	Poor resistance
Flammability	UL94	HB
Density	g/cm ²	1,41
Colour	-	White

Availability:

Sheet:	Size:	500 x 3000 mm (smaller sizes are possible)
	Thickness:	5 - 100 mm
	Size:	620 x 3000 mm (smaller sizes are possible)
	Thickness:	10 - 150 mm
	Size:	1000 x 2000 mm (smaller sizes are possible)
	Thickness:	10 - 100 mm
Rod:	Length:	3000 mm (shorter lengths are possible)
	Diameter	4 - 300 mm
	Length:	1000 mm (shorter lengths are possible)
	Diameter	350, 400 and 500 mm
Tube:	Length:	3000 mm (shorter lengths are possible)
	Minimum Inside diameter:	Ø10 mm
	Maximum Outside diameter:	Ø505 mm
Cut pieces:	On request	
Parts:	Finished products according to drawing	