

# Multiplast Pa6 natural

Multiplast Pa6 natural is a semi-crystalline polymers, an extruded polyamide, with:

- Extreme toughness
- Extreme impact resistance
- Good chemical resistance

Properties	Units		
Modulus of elasticity (tensile test)	MPa	3300	
Tensile strength	MPa	79	
Tensile strength at yield	MPa	78	
Elongation at yield	%	4	
Elongation at break	%	130	
Modulus of elasticity (flexural test)	MPa	2900	
Flexural strength	MPa	100	
Compression modulus	MPa	2700	
Compressive strength (1% / 2%)	MPa	24 / 41	
Impact strength (Charpy)	kJ / m <sup>2</sup>	-	
Notched impact strength (Charpy)	kJ / m <sup>2</sup>	7	
Ball indentation hardness	MPa	155	
Glass transition temperature	°C	45	
Melting temperature	°C	221	
Service temperature	short term	°C	160
	long term	°C	100
Thermal expansion	23 °C – 60 °C	10 <sup>-5</sup> K <sup>-1</sup>	12
	23 °C – 100 °C	10 <sup>-5</sup> K <sup>-1</sup>	13
Specific heat	J / (g x K)	1,6	
Thermal conductivity	W / m K	0,37	

Properties	Units	
Specific surface resistance	$\Omega$	$10^{14}$
Specific volume resistance	$\Omega \times \text{cm}$	$10^{14}$
Dielectric strength	kV / mm	31
Resistance to tracking (CTI)	V	600
Water absorption 24 h / 96 h (@ 23°C)	%	0,3 / 0,6
Resistance to hot water / bases	-	Limited resistance
Resistance to weathering	-	Poor resistance
Flammability	UL94	HB
Density	g/cm <sup>3</sup>	1,14
Colour	-	Ivory

**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 - 50 mm
Rod:	Length:	3000 mm (shorter lengths are possible)
	Diameter	6 - 250 mm
Tube:	Length:	3000 mm (shorter lengths are possible)
	Minimum Inside diameter:	Ø25 mm
	Maximum Outside diameter:	Ø80 mm
Cut pieces:	On request	
Parts:	Finished products according to drawing	