

## Multiplast Pa6G natural

Multiplast Pa6G natural is a semi-crystalline polymers, a cast polyamide, with:

- Extreme toughness
- Extreme impact resistance
- Good chemical resistance
- Excellent sliding properties
- Excellent wear properties

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 <sup>14</sup>
Specific volume resistance	$\Omega \times \text{cm}$	10 <sup>14</sup>
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>2</sup>	1,14
Colour	-	Ivory

#### Availability:

Sheet:            Size:                            1000 x 2000 mm (smaller sizes are possible)  
                       Thickness:                        10 - 120 mm

                      Size:                            1220 x 3000 mm (smaller sizes are possible)  
                       Thickness:                        10 - 60 mm

Rod:                Length:                            3000 mm (shorter lengths are possible)  
                       Diameter                            50 - 500 mm

Tube:                Length:                            3000 mm (shorter lengths are possible)  
                       Minimum Inside diameter:    Ø50 mm  
                       Maximum Outside diameter:   Ø250 mm

                      Length:                            2000 mm (shorter lengths are possible)  
                       Minimum Inside diameter:    Ø200 mm  
                       Maximum Outside diameter:   Ø300 mm

Cut pieces:        On request

Parts:                Finished products according to drawing