

## Multiplast PEEK GF30

Multiplast PEEK GF30, Polyether ether ketone 30% glass filled, is a high temperature-resistant thermoplastics with higher strength compared to Multiplast PEEK. The high strength of the semi-crystalline aromatic polymers is maintained even at high temperatures. Multiplast PEEK GF30 has:

- Very good impact strength at low temperatures
- High mechanical fatigue strength
- Very low tendency to creep
- Good sliding properties
- Good wear resistance
- Long-term service temperatures up to +260 °C
- Excellent mechanical properties (even at high temperatures)
- Excellent Chemical Resistance

Properties	Units		
Modulus of elasticity (tensile test)	MPa	6400	
Tensile strength	MPa	105	
Tensile strength at yield	MPa	105	
Elongation at yield	%	3	
Elongation at break	%	3	
Modulus of elasticity (flexural test)	MPa	6600	
Flexural strength	MPa	164	
Compression modulus	MPa	4800	
Compressive strength (1% / 2%)	MPa	29 / 52	
Impact strength (Charpy)	kJ / m <sup>2</sup>	33	
Notched impact strength (Charpy)	kJ / m <sup>2</sup>	-	
Ball indentation hardness	MPa	316	
Glass transition temperature	°C	147	
Melting temperature	°C	341	
Service temperature	short term	°C	300
	long term	°C	260
Thermal expansion	23 °C – 60 °C	10 <sup>-5</sup> K <sup>-1</sup>	4
	23 °C – 100 °C	10 <sup>-5</sup> K <sup>-1</sup>	4
Specific heat	J / (g x K)	1,0	
Thermal conductivity	W / m K	0,35	

Properties	Units	
Specific surface resistance	$\Omega$	$10^{14}$
Specific volume resistance	$\Omega \times \text{cm}$	$10^{14}$
Dielectric strength	kV / mm	36
Resistance to tracking (CTI)	V	-
Water absorption 24 h / 96 h (@ 23°C)	%	0,02 / 0,03
Resistance to hot water / bases	-	Good resistance
Resistance to weathering	-	Poor resistance
Flammability	UL94	V0
Density	g/cm <sup>3</sup>	1,53
Colour	-	Beige / Opaque

#### Availability:

Sheet:            Size:                            500 x 3000 mm (smaller sizes are possible)  
                       Thickness:                        10, 20, 30, 40 and 50 mm

Rod:                Length:                            3000 mm (shorter lengths are possible)  
                       Diameter                            8 - 100 mm

Cut pieces:        On request

Parts:                Finished products according to drawing