

Multiplast HMPE1000

Multiplast HMPE1000 is a high-modulus polyethylene which is also known as:

- UHMWPE (Ultra-high-molecular-weight polyethylene)
- UHMW (Ultra-high-molecular-weight)
- HPPE (high-performance polyethylene)

Multiplast HMPE1000 outstanding qualities are:

- Low coefficient of friction
- Self-lubricating
- Impact-proof
- High abrasion resistance

Properties	Units	
Tensile strength	MPa	22
Breaking strength at 23°C	MPa	44
Elongation at break	%	>350
Torsional stiffness at 23°C	MPa	250
Torsional stiffness at -40°C	MPa	370
Ball indentation hardness 30 sec. value	MPa	38
Shore hardness D	-	61
Abrasion (Sand-Slurry-Test)	%	80-100
Melting temperature	°C	137
Thermal coefficient of linear expansion 23-80°C	10 ⁻⁵ K ⁻¹	17-25
Thermal conductivity	W /m K	0,42
Dimensional stability under heat	°C	80
Volume resistance	Ω x cm	> 10 ¹⁵
Surface resistance	Ω	> 10 ¹³
Dielectric strength	KV / cm	90
Density	g/cm ³	0,94
Molecular weight	Millions	Ca. 4,5
Color	-	Standard colors are: Natural, Black and Green

Availability:

Sheet:	Size:	1000 x 2000 mm 1200 x 2000 mm 1250 x 2000 mm 1000 x 2600 mm 1000 x 3050 mm 2050 x 3050 mm Smaller parts are possible
	Thickness:	6 - 200 mm
Rod:	Length: Diameter	1000 & 2000 mm (shorter lengths are possible) Ø10 – Ø250 mm
Parts:	Finished products conform drawing	