

Polyethylene

PE1000 - HDPE - Polythene

Industry-leading thermoplastic polymer with outstanding chemical resistance, electrical insulation and tensile strength.



Material properties

Density	ISO 1183	0,94	g/cm ³
Water absorption at saturation	ISO 62	0,01	%
Hygroscopicity	ISO 62	0	%
Tensile strength	ISO 527	18	MPa
Elongation at break	ISO 527	> 50	%
Yield strength	ISO 527	18	MPa
Elastic modulus	ISO 527	750	MPa
Flexural strength	ISO EN 178	17	MPa
Resilience	ISO 179	No break	kJ/m ²
Hardness	ISO 868	61 D	Shore
HDT 0.45 MPa	ISO 75	70	°C
HDT 1.8 MPa	ISO 75	42	°C
Vicat softening temperature	ISO 306	80	°C
Melting temperature	ISO 11357	130-135	°C
Flammability	UL94	HB	

Maximum dimensions

500x500x90 mm (19.7x19.7x3.5 in)

Tolerances

ISO 2768-1 medium (m) class

Applications

Used in numerous industries due to its excellent tribological properties and impact resistance

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Thermal conductivity (20°C)	DIN 52612	0,4	W/mK
Volumic electrical resistivity	IEC 60093	> 10¹⁴	Ω*m

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