



HD PE (High Density Polyethylene)

Material Specification (Typical Properties)

Physical

Property	Method	Units	Specification
Specific Gravity	DIN 53479	g/cm ³	0.95
Water Absorption	DIN 53495	%	0.01

Mechanical

Property	Method	Units	Specification
Modulus of elasticity	DIN 53457	MPa	700
Elongation at Break	DIN 53455	%	>50
Tensile strength at break	DIN 53455	MPa	32
Tensile modulus	DIN 53457	MPa	700
Hardness Shore	ISO 868	Shore D	70 – 80
Ball Hardness	DIN 53456	MPa	40

Electrical

Property	Method	Units	Specification
Volume resistivity	DIN 53482	$\Omega \times \text{cm}$	10^{15}
Surface resistance	DIN 53482	Ω	10^{16}
Dielectric Strength	DIN 53481	KV/mm	>70

Thermal

Property	Method	Units	Specification
Specific heat capacity	DIN 53461	J/g	70
Thermal conductivity	DIN 52612	W/mK	0.41