

Lupolen UHM 5000 (PE-UHMW)

LyondellBasell Industries

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	800	MPa	ISO 527
Yield stress	20	MPa	ISO 527
Yield strain	12	%	ISO 527
Tensile Creep Modulus, 1h	550	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	300	MPa	ISO 899-1
Notched Impact Strength (Charpy), +23°C	no break	kJ/m ²	ISO 179/1eA
Shore Hardness D (15s)	63	-	ISO 868

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	135	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	45	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	68	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	82	°C	ISO 306

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	931	kg/m ³	ISO 1183
Intrinsic Viscosity	22	dl/g	-
Bulk density	450	kg/m ³	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Melt temperature	190 - 230	°C	-

Characteristics

Processing

Profile Extrusion, Compression Molding

Delivery form

Powder, Natural Color

Special Characteristics

Impact modified

Features

Tribologic Grade

Chemical Resistance

General Chemical Resistance, Environmental Stress Crack Resistance

Applications

Building Construction