

## Lupolen UHM 5000 (PE-UHMW)

LyondellBasell Industries

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
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 <sup>2</sup>	ISO 179/1eA
Shore Hardness D (15s)	63	-	ISO 868

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
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
<b>ISO Data</b>			
Density	931	kg/m <sup>3</sup>	ISO 1183
Intrinsic Viscosity	22	dl/g	-
Bulk density	450	kg/m <sup>3</sup>	-

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

### Disclaimer

#### Liability Exclusion

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