

Ultradur® B 4521 PRO
PBT

BASF

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm³/10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	2.1	%	ISO 294-4, 2577
Molding shrinkage, normal	2.5	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	60	MPa	ISO 527
Yield strain	10.8	%	ISO 527
Nominal strain at break	30	%	ISO 527
Impact Strength (Charpy), +23°C	228	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	140	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	4.5	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	55	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	155	°C	ISO 75-1/-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1300	kg/m³	ISO 1183
Bulk density	750	kg/m³	-

Material Specific Properties	Value	Unit	Test Standard
ISO Data			
Viscosity number	127	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Processing humidity	≤0.04	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	40 - 70	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Processing humidity	≤0.04	%	-
Melt temperature	250 - 270	°C	-

Characteristics

Processing

Injection Molding, Other Extrusion

Delivery form

Natural Color

Certifications

Medical, Biocompatibility ISO 10993, US Pharmacopeia Class VI
Approved, Drug Master File, Food approval

Applications

Medical, Packaging