

Technical Data Sheet



ALCOM LB PBT 1000 IM WT1177-20

Base Polymer	Polybutylene Terephthalate
Filler/Additive System	25 % special filler
Special Features	highly reflective,opaque,easy release (demoulding),injection moulding grade,high impact resistance
Market Segment	Automotive
Application Area	lighting,light blocking components
Typical Applications	light guides,reflectors

Pre-Drying Conditions	in a dry air (dessiccant) dryer 100-120 °C for 2-4 h in an air circulating dryer 100-120 °C for 4-8 h max. moisture content <0,02 %
Processing Injection Moulding	melt temperature 250-270 °C mould temperature 80-120 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2500	MPa	ISO 178
Flexural Stress (3.5% Strain)	67	MPa	ISO 178
Tensile Modulus	2700	MPa	ISO 527
Tensile Stress at Yield	45	MPa	ISO 527
Tensile Elongation at Yield	3.8	%	ISO 527
Tensile Elongation at Break	12	%	ISO 527
Impact Strength (Charpy, 23°C)	190	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	65	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	5	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	166	°C	ISO 306
DSC (Melt Point)	225	°C	ISO 11357
Rheological Properties			
Melt Index (MVR)	7	cm ³ /10min	ISO 1133
MVR temperature	250	°C	-
MVR load	2.16	kg	-
Shrinkage (lengthwise, 24h)	2.1 - 2.5	%	ISO 294-4
Shrinkage (lateral, 24h)	1.9 - 2.3	%	ISO 294-4

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Physical Properties

Density	1530	kg/m ³	ISO 1183
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Optical Properties

Tristimulus Value Y10 of Reflection (d=2,0mm)	95	%	DIN 5033
Tristimulus Value Y10 of Transm.,d=0.5mm	0.2	%	ISO 13468