Terylene® PBT COMPOUNDS

PRELIMINARY TECHNICAL DATA SHEET

B97 P2

ISSUED: 17/05/2021 **ISO 9001 CERTIFIED**

Terylene B97 P2 is a high viscosity unreinforced PBT extrusion grade.

PROPERTIES	CONDITIONS	TEST METHOD	UNITS	VALUES
PHYSICAL PROPERTIES				
Density	23 ºC	ISO 1183	g/cm^3	1,30
Moisture absorption	23 ºC / 50% r.h.	ISO 62	%	0,25
Water absorption	23 ºC / saturation in water	ISO 62	%	0,40
PROCESSING CONDITIONS				
Melt Volume rate	250ºC/2,16 kg	ISO 1133	cm^3/10 min	10
Intrinsic Viscosity		ISO 1628		1,3
Melt temperature, extrusion			ºC	230-290
Moulding Shrinkage	longitudinal transversal		%	1,3 1,6
MECHANICAL PROPERTIES				
Tensile modulus	23 ºC, 1 mm/min	ISO 527-1-2	MPa	2.700
Tensile strength	23 ºC, 50 mm/min	ISO 527-1-2	MPa	60
Elongation at break	23 ºC, 50 mm/min	ISO 527-1-2	%	15
Flexural modulus	23 ºC, 2 mm/min	ISO 178	MPa	2.400
Flexural strength	23 ºC, 2 mm/min	ISO 178	MPa	85
Charpy unnotched impact strength	23ºC	ISO 179/1eU	kJ/m^2	NB
Charpy notched impact strength	23ºC	ISO 179/1eA	kJ/m^2	5,0
THERMAL PROPERTIES				
Melting temperature (DSC)	10ºC/min	ISO 3146	ºC	223
Heat Deflection Temperature (HDT)	1,8 MPa 0,45 MPa	ISO 75-1-2	ºC	60 180
Thermal coefficient of linear expansion	23-80ºC long.	ISO 11359-1/-2	10^{-4}/K	1,3-1,6
ELECTRICAL PROPERTIES				
Dielectric constant	1MHz	IEC 60250		3,3
Dissipation factor	1 MHz	IEC 60250		200
Volume resistivity		IEC 60093	Ω.m	>10^{13}
Surface resistivity		IEC 60093	Ω	10^{13}
Comparative tracking index		IEC 60112		475

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CHARACTERISTICS

Terylene B97 P2 is a high viscosity PBT grade, with good processability, for the extrusion of tubes for optical fibers, cables, pipes and profiles.

APPLICATIONS

Terylene B97 P2 is used in a wide range of applications where a combination of mechanical properties, thermal resistance and dimensional stability are needed. Typical applications include tubes for optical fibers, cables, pipes and profiles.

FORMAT AND STORAGE

Terylene B97 P2 is supplied in moisture-proof packaging. Typical formats are Big Bag, octabin, and 25kg bags.

All containers are perfectly sealed. The product should be stored in a dry place and opened just before processing.

PROCESSING GUIDELINES

Drying

Max. Water content: 0,04%

To ensure optimum part performance, this product should be dried prior to moulding and maintained at a moisture level of less than 0,04%. Dehumidifying dryers operating at 100-120ºC for 4 hours drying time are recommended.

Extrusion

The recommended melt temperature for extrusion is:

Melt temperature: 230-290ºC

NOTE

All recommendations are based on knowledge and experience; The values have been established on standardized tests. The figures should be regarded as guide values and not as binding minimum values. As many factors may affect processing or applications, we recommend that customers make their own tests to determine the suitability of a product for its particular use.

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