Terylene® PBT COMPOUNDS

TECHNICAL DATA SHEET

B96 P2 GB20

ISSUED: 23/09/2022 **ISO 9001 CERTIFIED**

Terylene B96 P2 GB20 is a medium-viscosity PBT, injection moulding grade, 20% glass beads reinforced for stability, low-warpage and dimensional stable parts.

PROPERTIES	CONDITIONS	TEST METHOD	UNITS	VALUES
PHYSICAL PROPERTIES				
Density	23 ºC	ISO 1183	g/cm^3	1,45
Moisture absorption	23 ºC / 50% r.h.	ISO 62	%	0,20
Water absorption	23 ºC / saturation in water	ISO 62	%	0,40
Flammability	1,5 mm	UL-94		HB
PROCESSING CONDITIONS				
Melt Volume rate	250ºC/2,16 kg	ISO 1133	cm^3/10 min	12
Melt temperature, injection moulding			ºC	240-280
Mould temperature			ºC	40-80
Moulding Shrinkage	longitudinal transversal		%	1,8 1,8
MECHANICAL PROPERTIES				
Tensile modulus	23 ºC, 1 mm/min	ISO 527-1-2	MPa	4.000
Tensile strength	23 ºC, 50 mm/min	ISO 527-1-2	MPa	55
Elongation at break	23 ºC, 50 mm/min	ISO 527-1-2	%	5
Flexural modulus	23 ºC, 2 mm/min	ISO 178	MPa	3.000
Flexural strength	23 ºC, 2 mm/min	ISO 178	MPa	80
Charpy unnotched impact strength	23ºC	ISO 179/1eU	kJ/m^2	40
Charpy notched impact strength	23ºC	ISO 179/1eA	kJ/m^2	4
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	70 170
Thermal coefficient of linear expansion	23-80ºC long.	ISO 11359-1/-2	10^{-4}/K	0,25
ELECTRICAL PROPERTIES				
Volume resistivity		IEC 60093	Ω.m	>10^{13}
Surface resistivity		IEC 60093	Ω	10^{13}
Comparative tracking index		IEC 60112		250

NUREL ENGINEERING POLYMERS

NUREL ENGINEERING POLYMERS
Ctra. Barcelona km 329
50016 Zaragoza. Spain
T +34 976 465 579
F +34 976 574 108
nurelpolymers.com

Terylene® PBT COMPOUNDS

TECHNICAL DATA SHEET

B96 P2 GB20

CHARACTERISTICS

Terylene B96 P2 GB20 is a PBT injection moulding grade, reinforced with 20% glass beads for stability, low-warpage and dimensional stable parts.

APPLICATIONS

Terylene B96 P2 GB20 is used in a wide range of applications where a combination of mechanical properties, low-warpage and dimensional stability are needed.

Glass beads reinforced grades are suitable for technical parts such as housings, supports, covers, chassis and electrical parts.

FORMAT AND STORAGE

Terylene B96 P2 GB20 is supplied in moisture-proof packaging. Typical formats are Big Bag, octavin, 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.

Injection moulding

The recommended processing parameters for injection moulding are:

Melt temperature: 240-280ºC	Mould temperature: 40-80 ºC
Injection speed: high	Back pressure: moderate

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.

NUREL ENGINEERING POLYMERS
Ctra. Barcelona km 329
50016 Zaragoza. Spain
T +34 976 465 579
F +34 976 574 108
nurelpolymers.com