

ISSUED: 09/11/2019

ISO 9001 CERTIFIED

Terylene A95 P2 GFC30 is a PET, injection molding grade, 30% glass fibre reinforced. This material is suitable for Food Contact applications.

PROPERTIES	CONDITIONS	TEST METHOD	UNITS	VALUES
PHYSICAL PROPERTIES				
Density	23 °C	ISO 1183	g/cm³	1,56
Moisture absorption	23 °C / 50% r.h.	ISO 62	%	0,2
Water absorption	23 °C / saturation in water	ISO 62	%	0,7
Flammability	1,5 mm	UL-94		HB
PROCESSING CONDITIONS				
Melt Volume rate	275°C/2,16 kg	ISO 1133	cm³/10 min	30
Melt temperature, injection moulding			°C	270-300
Mould temperature			°C	80-120
Moulding Shrinkage	longitudinal		%	0,2
	transversal		%	0,8
MECHANICAL PROPERTIES				
Tensile modulus	23 °C, 1 mm/min	ISO 527-1-2	MPa	10.800
Tensile strength	23 °C, 50 mm/min	ISO 527-1-2	MPa	155
Elongation at break	23 °C, 50 mm/min	ISO 527-1-2	%	2,5
Flexural modulus	23 °C, 2 mm/min	ISO 178	MPa	8.300
Flexural strength	23 °C, 2 mm/min	ISO 178	MPa	195
Charpy unnotched impact strength	23°C	ISO 179/1eU	kJ/m²	60
	-30°C			-
Charpy notched impact strength	23°C	ISO 179/1eA	kJ/m²	11,5
	-30°C			-
THERMAL PROPERTIES				
Melting temperature (DSC)	10°C/min	ISO 3146	°C	252
Heat Deflection Temperature (HDT)	1,8 MPa	ISO 75-1-2	°C	224
	0,45 MPa			245
Thermal coefficient of linear expansion	23-80°C long.	ISO 11359-1/-2	10 ⁻⁴ /K	0,10
ELECTRICAL PROPERTIES				
Dielectric constant	1MHz	IEC 60250		3,8
Dissipation factor	1 MHz	IEC 60250		170
Volume resistivity		IEC 60093	Ω.m	>10 ¹³
Surface resistivity		IEC 60093	Ω	10 ¹³
Comparative tracking index		IEC 60112		250

CHARACTERISTICS

Terylene A95 P2 GFC30 is a PET injection molding grade distinguished by high strength and stiffness combined with dimensional stability, creep resistance, heat resistance, high surface gloss and good inherent electrical properties at elevated temperature.

APPLICATIONS

Terylene A95 P2 GFC30 is used in a wide range of demanding applications in automotive, electrical and electronics, where a combination of mechanical properties, thermal resistance and dimensional stability are needed. This material is suitable for Food Contact applications.

Glass-fibre reinforced grades are suitable for housings, supports, covers, consoles and electrical insulating parts.

FORMAT AND STORAGE

Terylene A95 P2 GFC30 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: 0,02%

To ensure optimum part performance, this product should be dried prior to moulding and maintained at a moisture level of less than 0,02%. Dehumidifying dryers operating at 100-120°C for 4 hours drying time are recommended.

Injection moulding

The recommended processing parameters for injection moulding are:

Melt temperature: 270-300°C

Mould temperature: 80-120 °C

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.