

PIBIFLEX® 2560 - TPC

Description

PIBIFLEX® 2560 is a nominal 27 Shore D thermoplastic polyester elastomer with low modulus and improved flow for injection molding applications and use as a performance modifier for TPE compounding.

Physical properties

ISO	Value	Unit	Test Standard
Density	1090	kg/m ³	ISO 1183
Melt volume rate, MVR	20	cm ³ /10min	ISO 1133
MVR temperature	220	°C	ISO 1133
MVR load	2.16	kg	ISO 1133
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577
Humidity absorption, 23°C/50%RH	0.95	%	ISO 62

Mechanical properties

ISO	Value	Unit	Test Standard
Tensile stress at break, 50mm/min	16	MPa	ISO 527-2/1A
Tensile strain at break, 50mm/min	>500	%	ISO 527-2/1A
Flexural modulus, 23°C	35	MPa	ISO 178
Charpy notched impact strength, 23°C	NB	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	NB	kJ/m ²	ISO 179/1eA
Izod impact notched, 23°C	NB	kJ/m ²	ISO 180/1A
Izod impact notched, -30°C	NB	kJ/m ²	ISO 180/1A
Shore D hardness, 15s	27	-	ISO 868

Thermal properties

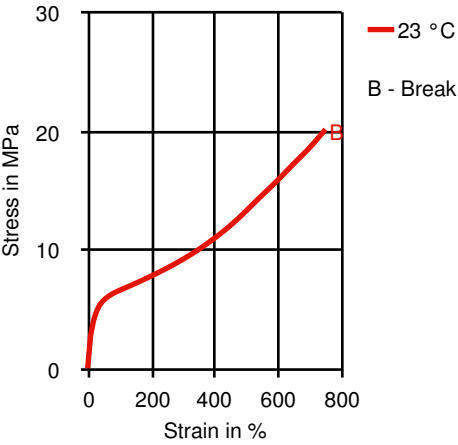
ISO	Value	Unit	Test Standard
Melting temperature, 10°C/min	185	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-75	°C	ISO 11357-1,-2,-3
Limiting oxygen index (LOI)	20	%	ISO 4589-1/-2



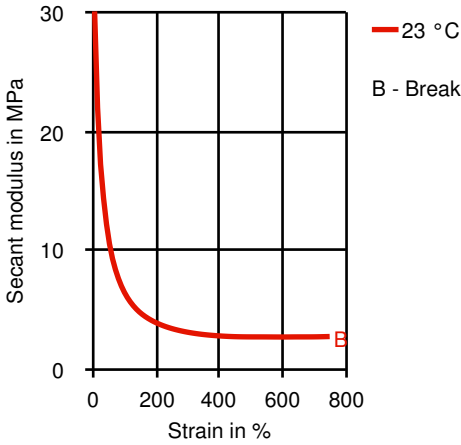
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Diagrams

Stress-strain



Secant modulus-strain



Typical injection moulding processing conditions

Pre Drying

	LowMaxRes	DryTime	DryTemp
max	0.05 %	4 h	110 °C
min			100 °C

Temperature

	HRTemp	CavTemp	MTemp	Nozzle Temp	Z4Temp	Z3Temp	Z2Temp	Z1Temp	FeedTem p	Hopper
max	190 °C	55 °C	190 °C	190 °C	190 °C	180 °C	180 °C	180 °C	170 °C	50 °C
min	170 °C	20 °C	170 °C	170 °C	170 °C	170 °C	170 °C	170 °C	155 °C	20 °C

Speed

	Value	Unit	Test Standard
Injection speed	medium-fast	-	-

Other text information

Pre-drying

To avoid hydrolytic degradation during processing, PIBIFLEX TPC resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-40 °F (-40 °C) at 225 °F (107 °C) for 4 hours.

Longer pre-drying times/storage

For subsequent storage of the material in the dryer until processed (<= 24h) it is necessary to lower the temperature to 80 °C.

Characteristics

Product Categories

Unfilled

Delivery Form

Pellets

