
PIBIFLEX® 3560 - TPC

Description

PIBIFLEX® 3560 is a nominal 32 Shore D thermoplastic polyester elastomer with medium 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	1110	kg/m ³	ISO 1183
Melt volume rate, MVR	24	cm ³ /10min	ISO 1133
MVR temperature	220	°C	ISO 1133
MVR load	2.16	kg	ISO 1133
Molding shrinkage, parallel	1.2 - 1.4	%	ISO 294-4, 2577
Water absorption, 23°C-sat	0.6	%	ISO 62

Mechanical properties

ISO	Value	Unit	Test Standard
Tensile modulus	50	MPa	ISO 527-2/1A
Tensile stress at 50% strain, 50mm/min	7	MPa	ISO 527-2/1A
Tensile stress at break, 50mm/min	18	MPa	ISO 527-2/1A
Tensile strain at break, 50mm/min	>500	%	ISO 527-2/1A
Flexural modulus, 23°C	33	MPa	ISO 178
Flexural strength, 23°C	4	MPa	ISO 178
Flexural stress at 3.5% strain	2	MPa	ISO 178
Charpy impact strength, 23°C	NB	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	NB	kJ/m ²	ISO 179/1eU
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
Shore D hardness, 15s	32	-	ISO 868

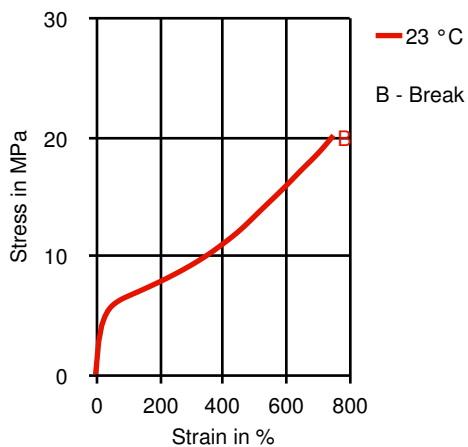
Thermal properties

ISO	Value	Unit	Test Standard
Melting temperature, 10°C/min	195	°C	ISO 11357-1/-3
DTUL at 0.45 MPa	47	°C	ISO 75-1, -2
Vicat softening temperature, 50°C/h 10N	127	°C	ISO 306
Coeff. of linear therm expansion, parallel	2.4	E-4/°C	ISO 11359-2

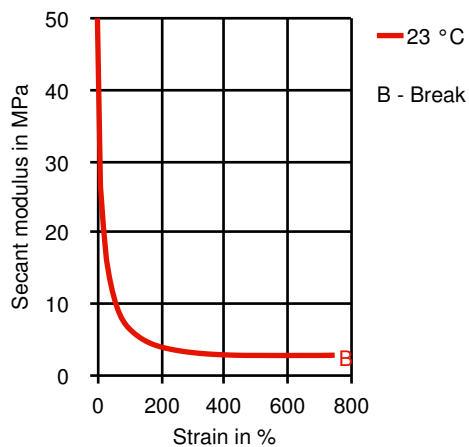
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Diagrams

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

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