Celanese
The chemistry inside innovation™

PIBIFLEX® 3567S2 - TPC

Description

PIBIFLEX® 3567S2 is a nominal 35 Shore D thermoplastic polyester elastomer with medium modulus and improved flow for injection molding applications, in particullar for MuCell injection molding (Dolphin process), UV stabilized and Hi scratch resistance.

Physical properties

ISO	Value	Unit	Test Standard
Density	**1120**	kg/m³	ISO 1183
Melt volume rate, MVR	**25**	cm³/10min	ISO 1133
MVR temperature	**220**	°C	ISO 1133
MVR load	**2.16**	kg	ISO 1133
Humidity absorption, 23°C/50%RH	**0.9**	%	ISO 62

Mechanical properties

ISO	Value	Unit	Test Standard
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	**55**	MPa	ISO 178
Charpy notched impact strength, 23°C	**NB**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**NB**	kJ/m²	ISO 179/1eA
Izod impact notched, 23°C	**NB**	kJ/m²	ISO 180/1A
Izod impact notched, -30°C	**NB**	kJ/m²	ISO 180/1A
Shore D hardness, 15s	**35**	-	ISO 868

Thermal properties

ISO	Value	Unit	Test Standard
Melting temperature, 10°C/min	**195**	°C	ISO 11357-1/-3
Limiting oxygen index (LOI)	**20**	%	ISO 4589-1/-2

Typical injection moulding processing conditions

Pre Drying

	LowMaxRes	DryTime	DryTemp
max	0.05 %	4 h	120 °C
min			110 °C

Temperature

	HRTemp	CavTemp	MTemp	Nozzle Temp	Z4Temp	Z3Temp	Z2Temp	Z1Temp	FeedTemp	Hopper
max	215 °C	55 °C	220 °C	215 °C	215 °C	210 °C	210 °C	200 °C	200 °C	50 °C
min	190 °C	20 °C	200 °C	190 °C	185 °C	185 °C	185 °C	185 °C	185 °C	20 °C

Speed	Value	Unit	Test Standard
Injection speed	**medium-fast**	-	-

Characteristics

Special Characteristics

High flow, UV resistant

Processing

Injection molding, Other extrusion