Celanese
The chemistry inside innovation™

PIBIFLEX® E4484TG - TPC

Description

PIBIFLEX® E4484TG is a nominal 45 Shore D thermoplastic polyester elastomer with high melting point, improved heat stability and use for extrusion molding applications and use as a performance modifier for TPE compounding.

Physical properties

ISO	Value	Unit	Test Standard
Density	**1200**	kg/m³	ISO 1183

Mechanical properties

ISO	Value	Unit	Test Standard
Tensile stress at break, 50mm/min	**28**	MPa	ISO 527-2/1A
Tensile strain at break, 50mm/min	**>500**	%	ISO 527-2/1A
Flexural modulus, 23°C	**165**	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	**45**	-	ISO 868

Thermal properties

ISO	Value	Unit	Test Standard
Melting temperature, 10°C/min	**213**	°C	ISO 11357-1/-3

Typical injection moulding processing conditions

Pre Drying

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

Temperature

	Hopper
max	50 °C
min	20 °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	Delivery Form
Tribological	Pellets