Celanese
The chemistry inside innovation™

PIBIFLEX® 2094S - TPC

Description

PIBIFLEX® 2094S is a nominal 20 Shore D thermoplastic polyester elastomer with Low modulus and improved scratch resistance for injection molding applications and extrusion application with vanilla flavor.

Physical properties

ISO	Value	Unit	Test Standard
Density	**1090**	kg/m³	ISO 1183
Melt volume rate, MVR	**9**	cm³/10min	ISO 1133
MVR temperature	**220**	°C	ISO 1133
MVR load	**2.16**	kg	ISO 1133
Molding shrinkage, parallel	**1.0**	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.5**	%	ISO 294-4, 2577

Mechanical properties

ISO	Value	Unit	Test Standard
Tensile nominal strain at break, 50mm/min	**>500**	%	ISO 527-2/1A
Tensile stress at break, 50mm/min	**12**	MPa	ISO 527-2/1A
Flexural modulus, 23°C	**30**	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
Shore D hardness, 15s	**22**	-	ISO 868

Thermal properties

ISO	Value	Unit	Test Standard
Melting temperature, 10°C/min	**185**	°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	110 °C
min			100 °C

Temperature

	HRTemp	CavTemp	MTemp	Nozzle Temp	Z4Temp	Z3Temp	Z2Temp	Z1Temp	FeedTemp	Hopper
max	190 °C	75 °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**	-	-

Characteristics

Special Characteristics

High flow, Specialty appearance

Delivery Form

Pellets

Product Categories

Tribological

Additives

Lubricants