

PRECITE®

P3 S1 black (7522)

PBT I

PRECITE® P3 S1 black (7522) is an unreinforced, medium viscosity polybutylene terephthalate (PBT) with high impact strength. Due to its low moisture absorption, this material has very good dimensional stability. It is particularly suitable for precision parts in the automotive, E&E or appliances industry.

Features

impact modified E&E

Properties

Modulus	Strength	Impact
1.750 MPa	40 MPa	180 kJ/m ²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	1750 MPa
Tensile stress at yield ISO 527-2	50 mm/min d.a.m.	40 MPa
Tensile strain at yield ISO 527-2	50 mm/min d.a.m.	6,5 %
Tensile stress at break ISO 527-2	50 mm/min d.a.m.	> 40 MPa
Charpy impact strength ISO 179-1/1eU	23°C d.a.m.	no break
Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m.	40 kJ/m ²

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	52 °C
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Melting temperature

ISO 11357-3

DSC, 10K/min

225 °C

Vicat softening temperature B50

ISO 306

50°C/50N

138 °C

Flammability

Flammability

UL 94

0,8 mm Wall thickness

HB Class

General Properties

Density

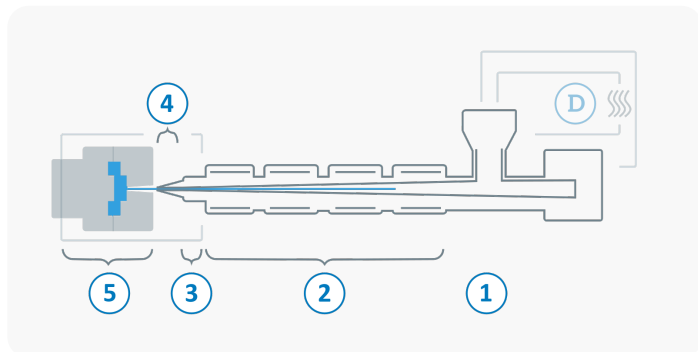
ISO 1183

23°C

1,25 g/cm³

Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	3 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	100 - 120 °C
	Processing moisture	0,02 - 0,04 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	240 - 270 °C
3	Nozzle temperature	240 - 280 °C
4	Melt temperature	250 - 270 °C
5	Mold temperature	60 - 80 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams

