

Product Texts

PBT, unreinforced
 general-purpose injection molding grade
 for high precision, high toughness and dimensionally
 stable engineering parts
 different viscosities available

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2500	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	4	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Tensile creep modulus, 1h	2600	MPa	ISO 899-1
Tensile creep modulus, 1000h	1600	MPa	ISO 899-1
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	4	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	224	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	65	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	165	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	130	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	130	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	-
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.3	-	IEC 62631-2-1
Dissipation factor, 1MHz	200	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	26	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	0.5	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1310	kg/m ³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	240	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Characteristics**Processing**

Injection Molding

Regional Availability

Europe

Delivery form

Pellets

Other text information

Injection Molding

PREPROCESSING

Max. Water Content 0,04%

Pre-Drying: 120°C 2-4 Hours

PROCESSING

Melt Temperature 240-260°C

Mould Temperature 80°C