

Product Texts

Injection Molding, Unreinforced, Heat Stabilized, Laser Transparent Black

ISO 1043 PA6

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.0 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3500 / 1000	MPa	ISO 527
^[C] Yield stress	80 / 45	MPa	ISO 527
^[C] Yield strain	4 / 20	%	ISO 527
^[C] Nominal strain at break	10 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	- / 25	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	- / 10	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	5760 / -	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	6120 / -	N	ISO 6603-2
^[C] Puncture energy, +23°C	70 / -	J	ISO 6603-2
^[C] Puncture energy, -30°C	50 / -	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	221 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	60 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	170 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	80 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	100 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	10 / *	%	Sim. to ISO 62
^[C] Humidity absorption	3 / *	%	Sim. to ISO 62
^[C] Density	1130 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-

Melt temperature	260 - 280	°C	-
Mold temperature	80 - 100	°C	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Regional AvailabilityNorth America, Europe, Asia Pacific, South and Central America,
Near East/Africa**Other text information****Injection molding**

PREPROCESSING

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 260 - 280 °C

Mold temperature: 80 - 100 °C