

Product Texts

Injection Molding, Unreinforced, Heat Stabilized, Improved flow, Improved Impact

ISO 1043 PA66-I

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.9 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.7 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1850 / 650	MPa	ISO 527
^[C] Yield stress	48 / 30	MPa	ISO 527
^[C] Yield strain	15 / 35	%	ISO 527
^[C] Nominal strain at break	>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	80 / 100	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	20 / 20	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	5430 / 4500	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	6150 / 6100	N	ISO 6603-2
^[C] Puncture energy, +23°C	44 / 37.5	J	ISO 6603-2
^[C] Puncture energy, -30°C	43.4 / 40.7	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	262 / *	°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	140 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	150 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	130 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	7 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2 / *	%	Sim. to ISO 62
^[C] Density	1070 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	280	°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	270 - 290	°C	-
Mold temperature	80 - 90	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Regional Availability

North 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): 270 - 290 °C

admissible residence time at Tmax <=10 min

Mold temperature: 80 - 90 °C