

Product Texts

Injection Molding, Unreinforced, Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA66 FR(30)

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3500 / 1400	MPa	ISO 527
^[C] Yield stress	94 / 55	MPa	ISO 527
^[C] Yield strain	4.2 / 20	%	ISO 527
^[C] Nominal strain at break	10 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	110 / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	120 / 185	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	- / 15	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	3730 / 4630	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	2400 / -	N	ISO 6603-2
^[C] Puncture energy, +23°C	13.1 / 27.2	J	ISO 6603-2
^[C] Puncture energy, -30°C	5.1 / -	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	265 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	75 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	210 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	70 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
^[C] Oxygen index	30 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1140 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	133 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	260	°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	≤0.07	%	-
Melt temperature	260 - 270	°C	-
Mold temperature	80 - 100	°C	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Delivery form

Pellets

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 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 260 - 270 °C

admissible residence time at Tmax <5 min

Mold temperature: 80 - 100 °C