

Product Texts

Low/Medium Viscosity, General purpose, Injection Molding, Food Contact Quality

ISO 1043 PA6

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	44 / *	cm ³ /10min	ISO 1133
Temperature	260 / *	°C	-
Load	2.16 / *	kg	-
^[C] Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
^[C] Density of melt	960	kg/m ³	-
^[C] Thermal conductivity of melt	0.23	W/(m K)	-
^[C] Spec. heat capacity of melt	2680	J/(kg K)	-
^[C] Eff. thermal diffusivity	8.82E-8	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3200 / 1000	MPa	ISO 527
^[C] Yield stress	87 / 45	MPa	ISO 527
^[C] Yield strain	4 / 25	%	ISO 527
^[C] Nominal strain at break	20 / >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	4.5 / 35	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	2.5 / 5	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	220 / *	°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	150 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	195 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	90 / *	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	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	3.0 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Oxygen index	26 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.2 / 14	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3 / 4.5	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	50 / 3000	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150 / 1200	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	28 / 20	kV/mm	IEC 60243-1
^[C] Comparative tracking index	* / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	10 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.8 / *	%	Sim. to ISO 62
^[C] Density	1130 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	132 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Applications

General Purpose

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific

Certifications

Food contact

Other text information

Injection molding

[Injection Molding Recommendations](#)
[Steel recommendations for molds screws and barrels](#)
[Trouble shooting guideline for injection molding](#)