

Product Texts

Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA6 FR(30)

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	34.8 / *	cm ³ /10min	ISO 1133
Temperature	250 / *	°C	-
Load	2.16 / *	kg	-
^[C] Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
^[C] Density of melt	898	kg/m ³	-
^[C] Thermal conductivity of melt	0.28	W/(m K)	-
^[C] Spec. heat capacity of melt	2530	J/(kg K)	-
^[C] Eff. thermal diffusivity	1.22E-7	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3800 / 1400	MPa	ISO 527
^[C] Yield stress	80 / 40	MPa	ISO 527
^[C] Yield strain	3.5 / 22	%	ISO 527
^[C] Nominal strain at break	6 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	95 / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	90 / 85	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	5 / 12	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	3 / 3	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	75 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	180 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	204 / *	°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-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	3.0 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Oxygen index	40 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.3 / 8	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.2 / 3.6	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	90 / 1250	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	200 / 800	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	30 / 25	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	9 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.5 / *	%	Sim. to ISO 62
^[C] Density	1180 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

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

Regional Availability

North America, Europe, Asia Pacific

Other text information

Injection molding

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