

Product Texts

Product-nomenclature: ISO 16396-PA6T/6I,GF60,M1H,C12-220

Co Polyamide

Partially aromatic Polyamide

Product Attributes

Improved heat resistance, Improved UV resistance (outdoor use)

Markets

Automotive

Air intake systems, Compressed air systems, Hydraulic systems, Automotive electr. and electronics, lighting, Cooling and climate control, Fuel systems, Powertrain and Chassis, Interior, Exterior

Electricals & Electronics

Electrical appliances, Electrical equipment, Connectors, Energy distribution

Industry & Consumer goods

Housewares, Hydraulics & Pneumatics, Mechanical Engineering, Power transmission, Sports & Leisure, Tools & Accessories

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577
^[C] Density of melt	1650	kg/m ³	-
^[C] Thermal conductivity of melt	0.32	W/(m K)	-
^[C] Spec. heat capacity of melt	2000	J/(kg K)	-
^[C] Eff. thermal diffusivity	9.7E-8	m ² /s	-
^[C] Ejection temperature	280	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	23000 / 22500	MPa	ISO 527
^[C] Stress at break	260 / 250	MPa	ISO 527
^[C] Strain at break	1.5 / 1.5	%	ISO 527
^[C] Charpy impact strength, +23°C	75 / 75	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	75 / 75	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11 / 11	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10 / 10	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	1200 / 1200	N	ISO 6603-2
^[C] Puncture energy, +23°C	3.5 / 3.5	J	ISO 6603-2
^[C] Shore D hardness	92 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	325 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 8.00 MPa	215 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	15 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	40 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E11 / 1E11	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
^[C] Electric strength	30 / 30	kV/mm	IEC 60243-1
^[C] Comparative tracking index	- / 350	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	3 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.2 / *	%	Sim. to ISO 62
^[C] Density	1780 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Granules, Black

Special Characteristics

U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa