

Product Texts

Product-nomenclature: ISO 16396-PAMACM12 PA12,,GHLT,C18-020

Transparent Polyamide

Product Attributes

Improved flowability and demoulding, Improved alcohol resistance, Improved impact resistance, Highly transparent

Markets

Automotive

Automotive electr. and electronics, lighting, Cooling and climate control, Fuel systems, Powertrain and Chassis, Interior

Electricals & Electronics

Electrical appliances, Electrical equipment, Connectors, Energy distribution, Mobile phones and other portable devices, Lighting

Industry & Consumer goods

Housewares, Hydraulics & Pneumatics, Mechanical Engineering, Medical devices, Power transmission,

Sanitary, water and gas supply, Sports & Leisure, Tools & Accessories

Optics

Optical components, Safety glasses, Sunglasses, Spectacle frames

Approvals

Food Contact

EU Requirements, FDA

Medical

ISO 10993

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	- / 1500	MPa	ISO 527
^[C] Yield stress	- / 60	MPa	ISO 527
^[C] Yield strain	- / 6	%	ISO 527
^[C] Nominal strain at break	- / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	- / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	- / N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	- / 9	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	- / 12	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	125 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	80 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	100 / *	°C	ISO 75-1/-2
^[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 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	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
^[C] Electric strength	- / 35	kV/mm	IEC 60243-1
^[C] Comparative tracking index	- / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	3 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.5 / *	%	Sim. to ISO 62
^[C] Density	1000 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Granules, Natural Color

Additives

Lubricants, Release agent

Special Characteristics

High impact or impact modified, Transparent

Certifications

Food contact, Food approval FDA 21 CFR, Biocompatibility ISO 10993

Applications

Automotive, Electrical and Electronical, Medical, Sports Equipment

Regional Availability

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