

Product Texts

Product Nomenclature: ISO 16396-PA12,GF50,M1H,C18-120

Product Attributes

Hydrolysis resistant, Improved impact resistance, Improved heat resistance, Improved UV resistance (outdoor use)

Markets

Industry & Consumer goods

Heating systems, Housewares, Sanitary, water and gas supply

Approvals

Food Contact

NSF 51, EU Requirements, FDA

Potable Water Contact

NSF 61, KTW, WRAS, ACS, DVGW W270

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]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	12000 / 11500	MPa	ISO 527
^[C] Stress at break	155 / 135	MPa	ISO 527
^[C] Strain at break	5 / 6	%	ISO 527
^[C] Charpy impact strength, +23°C	90 / 80	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	90 / 80	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	19 / 20	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	15 / 15	kJ/m ²	ISO 179/1eA
^[C] Shore D hardness	82 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	178 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	165 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 8.00 MPa	125 / *	°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	120 / *	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	0.8 / *	%	Sim. to ISO 62
^[C] Humidity absorption	0.4 / *	%	Sim. to ISO 62
^[C] Density	1470 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Granules, Black

Special Characteristics

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

Certifications

Food contact, Food approval FDA 21 CFR, Drinking water contact, Drinking water contact KTW, Drinking water contact DVGW W270, Drinking water contact NSF 61

Regional Availability

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