

**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
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577

[C]: CAMPUS

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

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	178 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	165 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	125 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	15 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	120 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> 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
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	- / 1E11	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	- / 35	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	- / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.8 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.4 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1470 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Granules, Natural Color

**Special Characteristics**

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

**Chemical Resistance**

Hydrolytically Stable

**Certifications**

Food contact, Food approval FDA 21 CFR, Food approval NSF 51, 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