

**Product Texts**

Product-nomenclature: ISO 16396-PA12,GF50,M1HR,C18-120

**Product Attributes**

Hydrolysis resistant, Improved alcohol resistance, Improved impact resistance, Improved heat resistance

**Markets**

**Automotive**

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

**Electricals & Electronics**

Electrical appliances, Connectors, Mobile phones and other portable devices

**Industry & Consumer goods**

Heating systems, Housewares, Hydraulics & Pneumatics, Mechanical Engineering, Medical devices, Power transmission, Sanitary, water and gas supply, Sports & Leisure, Tools & Accessories

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
<sup>[C]</sup> Density of melt	1280	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.28	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2000	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	1.09E-7	m <sup>2</sup> /s	-
<sup>[C]</sup> Ejection temperature	155	°C	-

[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	- / 1E12	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

## Grilamid LV-5H black 9288

PA12-GF50

EMS-GRIVORY | a unit of EMS-CHEMIE AG

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

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>280</b>	°C	ISO 294
Injection Molding, mold temperature	<b>80</b>	°C	ISO 294
Injection Molding, injection velocity	<b>300</b>	mm/s	ISO 294
Injection Molding, pressure at hold	<b>75</b>	MPa	ISO 294

[C]: CAMPUS

### Characteristics

#### Processing

Injection Molding

#### Delivery form

Granules, Black

#### Special Characteristics

High impact or impact modified, Light stabilized or stable to light, Heat stabilized or stable to heat

#### Chemical Resistance

Hydrolytically Stable

#### Applications

Automotive, Electrical and Electronical, Medical, Sports Equipment

#### Regional Availability

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