

**Product Texts**

Product-nomenclature: ISO 16396-PA12,GF30,M1R,C22-060

**Product Attributes**

Hydrolysis resistant, Improved impact resistance, Improved heat resistance

**Markets**

**Automotive**

Cooling and climate control, Fuel systems

**Processing/Physical Characteristics**      **dry / cond**      **Unit**      **Test Standard**

**ISO Data**

<sup>[C]</sup> Molding shrinkage, parallel	<b>0.1 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.7 / *</b>	%	ISO 294-4, 2577

[C]: CAMPUS

**Mechanical properties**      **dry / cond**      **Unit**      **Test Standard**

**ISO Data**

<sup>[C]</sup> Tensile Modulus	<b>6700 / 6000</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>110 / 105</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>5 / 8</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>85 / 80</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>75 / 80</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>20 / 20</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>15 / 15</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

**Thermal properties**      **dry / cond**      **Unit**      **Test Standard**

**ISO Data**

<sup>[C]</sup> Melting temperature, 10°C/min	<b>178 / *</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>160 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	<b>90 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Burning Behav. at thickness h	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / *</b>	mm	-

[C]: CAMPUS

**Electrical properties**      **dry / cond**      **Unit**      **Test Standard**

**ISO Data**

<sup>[C]</sup> Volume resistivity	<b>- / 1E11</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>* / 1E12</b>	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	<b>- / 35</b>	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	<b>- / 600</b>	-	IEC 60112

[C]: CAMPUS

**Other properties**      **dry / cond**      **Unit**      **Test Standard**

<sup>[C]</sup> Water absorption	<b>1.1 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>0.6 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1220 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

Hydrolytically Stable

## Grilamid LV-3A HX black 9288

PA12-GF30

EMS-GRIVORY | a unit of EMS-CHEMIE AG

### Delivery form

Granules, Black

### Applications

Automotive

### Special Characteristics

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

### Regional Availability

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