

**Product Texts**

Product-nomenclature: ISO 16396-PA12,CF30,M1HR,C18-120

**Product Attributes**

Improved impact resistance, Improved heat resistance, Anti-static,  
Improved UV resistance (outdoor use)

**Markets**

**Electricals & Electronics**

Mobile phones and other portable devices

**Industry & Consumer goods**

Mechanical Engineering, Medical devices, Power transmission, Sports & Leisure, Tools & Accessories

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.1 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.3 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	<b>1020</b>	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	<b>0.32</b>	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	<b>2500</b>	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	<b>1.25E-7</b>	m <sup>2</sup> /s	-
<sup>[C]</sup> Ejection temperature	<b>155</b>	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>15000 / 13000</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>160 / 150</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>3.5 / 4</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>65 / 65</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>65 / 65</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
<sup>[C]</sup> Shore D hardness	<b>82 / *</b>	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<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>165 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	<b>125 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>10 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>130 / *</b>	E-6/K	ISO 11359-1/-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
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>- / 100</b>	Ohm*m	IEC 62631-3-1

[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>1150 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

## Grilamid LC-3H black

PA12-CF30

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>260</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

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

#### Regional Availability

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