

**Product Texts**

Product-nomenclature: ISO 16396-PA12,GB50,M1HR,C18-030

**Product Attributes**

Improved heat resistance, Improved UV resistance (outdoor use)

**Markets**

**Automotive**

Automotive electr. and electronics, lighting, Powertrain and Chassis

**Electricals & Electronics**

Electrical appliances, Electrical equipment, Connectors, Mobile phones and other portable devices

**Industry & Consumer goods**

Housewares, Mechanical Engineering, Medical devices, Sanitary, water and gas supply, Tools & Accessories

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.8 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	1290	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	1900	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	1.14E-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	3100 / 2300	MPa	ISO 527
<sup>[C]</sup> Yield stress	50 / 45	MPa	ISO 527
<sup>[C]</sup> Yield strain	7 / 7	%	ISO 527
<sup>[C]</sup> Nominal strain at break	15 / 25	%	ISO 527
<sup>[C]</sup> Charpy impact strength, -30°C	65 / 65	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	5 / 5	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	4 / 4	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Shore D hardness	75 / *	-	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	65 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	40 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	1E11 / 1E11	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	35 / 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

## Grilamid LKN-5H natural

PA12-GB30

EMS-GRIVORY | a unit of EMS-CHEMIE AG

[C] Humidity absorption	<b>0.4 / *</b>	%	Sim. to ISO 62
[C] Density	<b>1470 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
[C] 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>200</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, Natural Color

#### Special Characteristics

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

#### Applications

Automotive, Electrical and Electronical, Medical

#### Regional Availability

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