

**Product Texts**

Product-nomenclature: ISO 16396-PA12,CD25,M1HLRZ,C18-020

**Product Attributes**

Improved heat resistance, Anti-static

**Markets**

**Automotive**

Automotive electr. and electronics, lighting, Powertrain and Chassis

**Electricals & Electronics**

Electrical equipment, Connectors

**Industry & Consumer goods**

Mechanical Engineering, Tools & Accessories

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	1.2 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.4 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	1000	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.24	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2800	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	8.57E-8	m <sup>2</sup> /s	-
<sup>[C]</sup> Ejection temperature	150	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	2200 / 1900	MPa	ISO 527
<sup>[C]</sup> Yield stress	55 / 50	MPa	ISO 527
<sup>[C]</sup> Yield strain	5 / 10	%	ISO 527
<sup>[C]</sup> Nominal strain at break	25 / 30	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	- / 50	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	3 / 2	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	3 / 2	kJ/m <sup>2</sup>	ISO 179/1eA

[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, 0.45 MPa	135 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	120 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	130 / *	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	- / 1	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 100	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	1.1 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.6 / *	%	Sim. to ISO 62

## Grilamid L 20 EC black

PA12

EMS-GRIVORY | a unit of EMS-CHEMIE AG

<sup>[C]</sup> Density **1160 / -** kg/m<sup>3</sup> ISO 1183  
<sup>[C]</sup>: 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>40</b>	°C	ISO 294
Injection Molding, injection velocity	<b>250</b>	mm/s	ISO 294
Injection Molding, pressure at hold	<b>75</b>	MPa	ISO 294

<sup>[C]</sup>: CAMPUS

### Characteristics

#### Processing

Injection Molding

#### Delivery form

Granules, Black

#### Special Characteristics

Anti-static, Light stabilized or stable to light, Heat stabilized or stable to heat

#### Applications

Automotive, Electrical and Electronical

#### Regional Availability

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