

**Grilamid L 16 GM nat**

PA12

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	<b>1500 / 1100</b>	MPa	ISO 527-1/-2
Yield stress	<b>45 / 45</b>	MPa	ISO 527-1/-2
Yield strain	<b>5 / 15</b>	%	ISO 527-1/-2
Nominal strain at break	<b>&gt;50 / &gt;50</b>	%	ISO 527-1/-2
Stress at break	<b>50 / 50</b>	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	<b>N / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	<b>N / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	<b>- / 6</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	<b>- / 5</b>	kJ/m <sup>2</sup>	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	<b>- / 70</b>	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	<b>178 / -</b>	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	<b>50 / -</b>	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	<b>130 / -</b>	°C	ISO 75-1/-2
Burning Behav. at thickness h	<b>HB / -</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / -</b>	mm	IEC 60695-11-10
Max. usage temperature (long term)	<b>90 - 110</b>	°C	ISO 2578
Max. usage temperature (short term)	<b>150</b>	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Relative permittivity (1MHz)	<b>- / 3</b>	-	IEC 60250
Dissipation factor (1MHz)	<b>- / 400</b>	E-4	IEC 60250
Volume resistivity	<b>- / 1E12</b>	Ohm*m	IEC 60093
Surface resistivity	<b>- / 1E13</b>	Ohm	IEC 60093
Electric strength	<b>- / 32</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>- / 600</b>	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	<b>1.5 / -</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.4 / -</b>	%	Sim. to ISO 62
Density	<b>1010 / -</b>	kg/m <sup>3</sup>	ISO 1183

**Characteristics**

**Processing**

Injection Molding

**Product Attributes**

Improved flowability and demoulding, Nucleated

**Delivery form**

Granules

**Electricals & Electronics**

Electrical equipment, Connectors

**Special Characteristics**

Improved heat resistance

**Industry & Consumer goods**

Housewares, Hydraulics & Pneumatics, Mechanical Engineering, Sports & Leisure, Tools & Accessories

**Regional Availability**

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