

**Grilamid 2D 20 nat**  
 PA612

EMS-GRIVORY | a unit of EMS-CHEMIE AG

**Product Texts**

 Product-nomenclature according to ISO 1874:  
 PA612, EM, 22-020

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	<b>2300 / 1600</b>	MPa	ISO 527-1/-2
Yield stress	<b>60 / 50</b>	MPa	ISO 527-1/-2
Yield strain	<b>4 / 16</b>	%	ISO 527-1/-2
Nominal strain at break	<b>&gt;50 / &gt;50</b>	%	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>5 / 10</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	<b>6 / 6</b>	kJ/m <sup>2</sup>	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Shore D hardness (15s)	<b>81 / 76</b>	-	ISO 868

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	<b>218 / -</b>	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	<b>60 / -</b>	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	<b>130 / -</b>	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	<b>110 / -</b>	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	<b>90 / -</b>	E-6/K	ISO 11359-1/-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>80</b>	°C	ISO 2578
Max. usage temperature (short term)	<b>150</b>	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	<b>1E8 / 1E8</b>	Ohm*m	IEC 60093
Surface resistivity	<b>- / 1E10</b>	Ohm	IEC 60093
Electric strength	<b>32 / 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>2.8 / -</b>	%	Sim. to ISO 62
Humidity absorption	<b>1.3 / -</b>	%	Sim. to ISO 62
Density	<b>1060 / -</b>	kg/m <sup>3</sup>	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	<b>1.7 / -</b>	%	ISO 294-4, 2577
Molding shrinkage (normal)	<b>1.7 / -</b>	%	ISO 294-4, 2577

**Characteristics**
**Processing**

Extrusion - cast film, Other Extrusion

**Product Attributes**

High viscosity

**Delivery form**

Granules

**Industry & Consumer goods**

Housewares, Mechanical Engineering, Tools &amp; Accessories



**Regional Availability**

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

**Food Contact**

EU Requirements, FDA

