

**Grilon BS V0**

PA6

EMS-GRIVORY | a unit of EMS-CHEMIE AG

**Product Texts**

Product designation according to ISO 1874:

PA6, MFHR, 14-040N

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	<b>3700 / 1200</b>	MPa	ISO 527-1/-2
Yield stress	<b>90 / 45</b>	MPa	ISO 527-1/-2
Yield strain	<b>3 / 15</b>	%	ISO 527-1/-2
Stress at break	<b>70 / 55</b>	MPa	ISO 527-1/-2
Strain at break	<b>4 / &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 notched impact strength (+23°C)	<b>3 / 15</b>	kJ/m <sup>2</sup>	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	<b>222 / -</b>	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	<b>70 / -</b>	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	<b>170 / -</b>	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	<b>70 / -</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 1.5 mm nom. thickn.	<b>V-0 / -</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5 / -</b>	mm	IEC 60695-11-10
Burning Behav. at thickness h	<b>V-0 / -</b>	class	IEC 60695-11-10
Thickness tested	<b>3.2 / -</b>	mm	IEC 60695-11-10
Oxygen index	<b>32 / -</b>	%	ISO 4589-1/-2
Max. usage temperature (long term)	<b>100 - 120</b>	°C	ISO 2578
Max. usage temperature (short term)	<b>180</b>	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Relative permittivity (100Hz)	<b>3 / 8</b>	-	IEC 60250
Relative permittivity (1MHz)	<b>4 / 4</b>	-	IEC 60250
Dissipation factor (100Hz)	<b>30 / 1000</b>	E-4	IEC 60250
Dissipation factor (1MHz)	<b>200 / 850</b>	E-4	IEC 60250
Volume resistivity	<b>1E12 / 1E11</b>	Ohm*m	IEC 60093
Surface resistivity	<b>- / 1E12</b>	Ohm	IEC 60093
Electric strength	<b>32 / 29</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>- / 575</b>	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	<b>8 / -</b>	%	Sim. to ISO 62
Humidity absorption	<b>2.5 / -</b>	%	Sim. to ISO 62
Density	<b>1160 / -</b>	kg/m <sup>3</sup>	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	<b>0.8 / -</b>	%	ISO 294-4, 2577
Molding shrinkage (normal)	<b>0.9 / -</b>	%	ISO 294-4, 2577

**Characteristics**

**Processing**

Injection Molding

**Product Attributes**

Nucleated

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**Delivery form**

Granules

**Automotive**

Automotive electr. and electronics, lighting

**Special Characteristics**

Flame retardant

**Electricals & Electronics**

Electrical appliances, Electrical equipment, Cables & Tubes, Connectors, Energy distribution, Lighting

**Regional Availability**

North America, Europe, Asia Pacific

**Burning Behaviour**

UL V0

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