

Grilon XE 5052 (BGZ-15 FC)

PA6-GF15

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA6-HI, MHR, 14-050N, GF15

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	5300 / 2800	MPa	ISO 527-1/-2
Stress at break	110 / 65	MPa	ISO 527-1/-2
Strain at break	5 / 15	%	ISO 527-1/-2
Charpy impact strength (+23°C)	75 / 90	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	70 / 75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 25	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	11 / 12	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	222 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	190 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	55 / -	°C	ISO 75-1/-2
Burning Behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	90 - 120	°C	EMS
Max. usage temperature (short term)	160	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E12 / 1E11	Ohm*m	IEC 60093
Surface resistivity	- / 1E12	Ohm	IEC 60093
Electric strength	40 / 35	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	8 / -	%	Sim. to ISO 62
Humidity absorption	2 / -	%	Sim. to ISO 62
Density	1180 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.2 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.7 / -	%	ISO 294-4, 2577

Characteristics

Processing

Injection Molding

Product Attributes

Improved flowability and demoulding

Delivery form

Pellets

Automotive

Automotive electr. and electronics, lighting, Powertrain and Chassis , Interior

Special Characteristics

High impact or impact modified

Electricals & Electronics

Electrical appliances, Electrical equipment, Connectors

Industry & Consumer goods

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