

Grilon BGZ-40

PA6-GF40

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA 6-HI, MHR, 14-110N, GF40

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	11000 / 7500	MPa	ISO 527-1/-2
Stress at break	170 / 115	MPa	ISO 527-1/-2
Strain at break	3.5 / 8	%	ISO 527-1/-2
Charpy impact strength (+23°C)	100 / 120	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	85 / 100	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	25 / 35	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	19 / -	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	220 / 120	MPa	ISO 2039-1

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)	205 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	120 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	20 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	60 / -	E-6/K	ISO 11359-1/-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	ISO 2578
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	41 / 37	kV/mm	IEC 60243-1
Comparative tracking index	- / 550	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	5 / -	%	Sim. to ISO 62
Humidity absorption	1.5 / -	%	Sim. to ISO 62
Density	1430 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.1 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.5 / -	%	ISO 294-4, 2577

Characteristics

Processing

Injection Molding

Special Characteristics

High impact or impact modified

Delivery form

Granules

Regional Availability

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