

Grilamid XE 4159 nat
 PA612

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	2500 / 2000	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6 / 6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	3 / 3	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	215 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	75 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	160 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	80 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	100 / -	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

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E9 / 1E9	Ohm*m	IEC 60093
Surface resistivity	- / 1E10	Ohm	IEC 60093
Electric strength	34 / 32	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	2.8 / -	%	Sim. to ISO 62
Humidity absorption	1.3 / -	%	Sim. to ISO 62
Density	1070 / -	kg/m ³	ISO 1183

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

Characteristics
Processing

Injection Molding

Automotive

Powertrain and Chassis

Delivery form

Granules

Electricals & Electronics

Electrical appliances

Regional Availability

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

Industry & Consumer goods

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