

Grilamid XE 4188 nat
 PA612

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

 Product-nomenclature according to ISO 1874:
 PA612, EH, 18-020

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	1800 / 1300	MPa	ISO 527-1/-2
Yield stress	50 / 45	MPa	ISO 527-1/-2
Yield strain	5 / 20	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	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)	50 / 90	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 12	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	100 / 70	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	218 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	50 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	120 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	160 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	110 / -	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	1E8 / 1E8	Ohm*m	IEC 60093
Surface resistivity	- / 1E10	Ohm	IEC 60093
Electric strength	38 / 38	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	2.7 / -	%	Sim. to ISO 62
Humidity absorption	1.2 / -	%	Sim. to ISO 62
Density	1040 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	3.0 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.4 / -	%	ISO 294-4, 2577

Characteristics
Processing

Other Extrusion

Delivery form

Granules

Special Characteristics

High impact or impact modified, Improved UV resistance (outdoor use), Improved heat resistance

Product Attributes

High viscosity, Hydrolysis resistant, Improved alcohol resistance

Automotive

Air intake systems, Compressed air systems, Hydraulic systems, Fuel systems

Electricals & Electronics

Cables & Tubes



Regional Availability

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

Industry & Consumer goods

Hydraulics & Pneumatics

