

Grilamid 2S 20 nat
PA610

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:
PA 610, EM, 18-020

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	2200 / 1300	MPa	ISO 527-1/-2
Yield stress	65 / 50	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)	7 / 13	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	5 / 5	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	128 / 82	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	223 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	55 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	140 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	110 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	90 / -	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)	80	°C	ISO 2578
Max. usage temperature (short term)	170	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E8 / 1E9	Ohm*m	IEC 60093
Surface resistivity	- / 1E10	Ohm	IEC 60093
Electric strength	35 / 30	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	3.9 / -	%	Sim. to ISO 62
Humidity absorption	1.7 / -	%	Sim. to ISO 62
Density	1080 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	1.3 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	1.4 / -	%	ISO 294-4, 2577

Characteristics

Processing

Extrusion - cast film, Other Extrusion

Product Attributes

High viscosity, Bio based Polyamide

Delivery form

Granules

Industry & Consumer goods

Housewares, Mechanical Engineering, Tools & Accessories

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Regional Availability

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

Food Contact

EU Requirements, FDA
