

Grilamid L 20A HL NZ nat PA12

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product-nomenclature according to ISO 1874:
PA12-HI, GHL, 18-010

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	1000 / 750	MPa	ISO 527-1/-2
Yield stress	30 / 30	MPa	ISO 527-1/-2
Yield strain	13 / 18	%	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)	85 / 85	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	60 / 40	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Shore D hardness (15s)	65 / 65	-	ISO 868

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	179 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	45 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	70 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	170 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	210 / -	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 - 100	°C	ISO 2578
Max. usage temperature (short term)	150	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E9 / 1E9	Ohm*m	IEC 60093
Surface resistivity	- / 1E11	Ohm	IEC 60093
Electric strength	40 / 40	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	1.3 / -	%	Sim. to ISO 62
Humidity absorption	0.6 / -	%	Sim. to ISO 62
Density	980 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	1.0 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	1.6 / -	%	ISO 294-4, 2577

Characteristics

Processing

Injection Molding, Other Extrusion

Delivery form

Granules

Product Attributes

Flexible, Hydrolysis resistant, Improved alcohol resistance

Automotive

Air intake sytems, Compressed air systems, Cooling and climate control



Special Characteristics

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

Regional Availability

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

Electricals & Electronics

Cables & Tubes

Industry & Consumer goods

Hydraulics & Pneumatics, Sports & Leisure, Tools & Accessories

