

Grilamid XE 3982

PA12

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA12-HIP, EHL, 24-002

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	195 / 195	MPa	ISO 527-1/-2
Stress at 50% strain	18 / 18	MPa	ISO 527-1/-2
Stress at break	45 / 40	MPa	ISO 527-1/-2
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)	N / N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	9 / 10	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Shore D hardness (15s)	- / 53	-	ISO 868
Ball indentation hardness	- / 20	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	170 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	80 / -	°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)	160 / -	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 - 110	°C	ISO 2578
Max. usage temperature (short term)	150	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	- / 1E9	Ohm*m	IEC 60093
Surface resistivity	- / 1E11	Ohm	IEC 60093
Electric strength	- / 39	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	1.2 / -	%	Sim. to ISO 62
Humidity absorption	0.5 / -	%	Sim. to ISO 62
Density	990 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.6 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	1.4 / -	%	ISO 294-4, 2577

Characteristics

Processing

Other Extrusion

Delivery form

Granules

Regional Availability

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

Product Attributes

Flexible



Additives

Plasticizer

Electricals & Electronics

Cables & Tubes

Special Characteristics

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

Industry & Consumer goods

Hydraulics & Pneumatics

