

Grivory XE 5106 (GVL-4H V0)

PA*-GF40

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:
PA66+PA6I/X, MFHR, 14-140N, GF40 FR(40)

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	14500 / 13000	MPa	ISO 527-1/-2
Stress at break	200 / 175	MPa	ISO 527-1/-2
Strain at break	2.1 / 2.4	%	ISO 527-1/-2
Charpy impact strength (+23°C)	70 / 65	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	70 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	25 / 25	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	25 / 25	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	265 / 250	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	260 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	250 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	210 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	20 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	50 / -	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	V-0 / -	class	IEC 60695-11-10
Thickness tested	1.6 / -	mm	IEC 60695-11-10
Burning Behav. 5V at thickness h	5VA / -	class	IEC 60695-11-20
Thickness tested	1.6 / -	mm	IEC 60695-11-20
Max. usage temperature (long term)	100 - 120	°C	ISO 2578
Max. usage temperature (short term)	220	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E10 / 1E10	Ohm*m	IEC 60093
Surface resistivity	- / 1E13	Ohm	IEC 60093
Electric strength	33 / 33	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	4.1 / -	%	Sim. to ISO 62
Humidity absorption	1.1 / -	%	Sim. to ISO 62
Density	1500 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.1 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.3 / -	%	ISO 294-4, 2577

Characteristics

Processing

Injection Molding

Delivery form

Granules

Automotive

Automotive electr. and electronics, lighting, Cooling and climate control, Powertrain and Chassis , Interior, Exterior

Electricals & Electronics

Electrical appliances, Electrical equipment, Connectors, Energy distribution, Lighting

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Special Characteristics

Flame retardant, Improved heat resistance

Regional Availability

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

Product Attributes

Long Fiber Reinforced, Partially aromatic Polyamide

Industry & Consumer goods

Heating systems, Housewares, Hydraulics & Pneumatics,
Mechanical Engineering, Power transmission, Sports & Leisure,
Tools & Accessories

Burning Behaviour

UL 5VA, UL V0
