

Grilamid TRVX-50X9 black 9230

PAMACM12-GF50

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product-nomenclature according to ISO 1874:
PA MACM12+X, MH, 12-120, GF50

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	- / 12500	MPa	ISO 527-1/-2
Stress at break	- / 160	MPa	ISO 527-1/-2
Strain at break	- / 2	%	ISO 527-1/-2
Charpy impact strength (+23°C)	- / 65	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	- / 60	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	- / 16	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	- / 15	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	- / 190	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Glass transition temperature (10°C/min)	125 / -	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	115 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	105 / -	°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)	80 / -	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)	120	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	- / 1E11	Ohm*m	IEC 60093
Surface resistivity	- / 1E12	Ohm	IEC 60093
Electric strength	- / 32	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	1 / -	%	Sim. to ISO 62
Humidity absorption	0.3 / -	%	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)	0.1 / -	%	ISO 294-4, 2577

Characteristics
Processing

Injection Molding

Automotive

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

Delivery form

Granules

Electricals & Electronics

Electrical appliances, Electrical equipment, Energy distribution, Mobile phones and other portable devices

Regional Availability

North America, Europe, Asia Pacific, South and Central America,

Near East/Africa

Industry & Consumer goods

Heating systems, Housewares, Hydraulics & Pneumatics,
Mechanical Engineering, Medical devices, Power transmission,
Tools & Accessories