

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

Delivery form

Granules

Regional Availability

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

Automotive

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

Electricals & Electronics

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

Near East/Africa

Industry & Consumer goods

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