

Grivory XE 4164 black 9225

PA*-GF30

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA 10T/X, MHF, 11-100, GF30

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	10500 / 10500	MPa	ISO 527-1/-2
Stress at break	150 / 150	MPa	ISO 527-1/-2
Strain at break	1.8 / 1.8	%	ISO 527-1/-2
Charpy impact strength (+23°C)	40 / 40	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	35 / 35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	8 / 8	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	271 / 264	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	316 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	275 / -	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	140 / -	°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)	70 / -	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB / -	class	IEC 60695-11-10
Thickness tested	1.5 / -	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.4 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	150	°C	ISO 2578
Max. usage temperature (short term)	250	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E9 / 1E9	Ohm*m	IEC 60093
Surface resistivity	- / 1E10	Ohm	IEC 60093
Electric strength	32 / 30	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	3.5 / -	%	Sim. to ISO 62
Humidity absorption	1.6 / -	%	Sim. to ISO 62
Density	1400 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.2 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.7 / -	%	ISO 294-4, 2577

Characteristics
Processing

Injection Molding

Product Attributes

 Hydrolysis resistant, Improved flowability and demoulding,
 Improved alcohol resistance, Bio based Polyamide, Co Polyamide,
 Partially aromatic Polyamide

Delivery form

Granules

Special Characteristics

Improved heat resistance

Regional AvailabilityNorth America, Europe, Asia Pacific, South and Central America,
Near East/Africa**Automotive**Air intake systems, Compressed air systems, Hydraulic systems,
Cooling and climate control, Fuel systems, Powertrain and Chassis
, Interior**Electricals & Electronics**Electrical appliances, Electrical equipment, Connectors, Energy
distribution, Mobile phones and other portable devices**Industry & Consumer goods**Hydraulics & Pneumatics, Mechanical Engineering, Power
transmission, Tools & Accessories