

EMS-Grivory Grivory® GV-5HL black 9914 PA*-GF50

Category : Polymer , Thermoplastic , Nylon

Material Notes:

Product description: Grivory GV-5HL black 9914 is a 50% glass fiber reinforced engineering thermoplastic material based on a combination of semicrystalline polyamide with partially aromatic copolyamide. Grivory GV-5HL black 9914 is UV-stabilized, it is used for injection molding technical parts with good surface quality, exhibiting exceptional characteristics even after moisture absorption: high stiffness and strengthdimensional stability, low warpagegood chemical resistancegood surface finishgood UV-stability Grivory GV is the economical alternative to die-cast alloys. It is suitable for production of technical parts in the application fields of: Electro / ElectronicsAutomotiveSafety technologyMechanical engineeringDomestic appliancesInformation provided by EMS Grivory

Order this product through the following link:

http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-GV-5HL-black-9914-PA-GF50.php

Physical Properties	Metric	English	Comments
Density	1.60 g/cc	0.0578 lb/in ³	ISO 1183
Water Absorption	4.0 %	4.0 %	ISO 62
Moisture Absorption	1.40 %	1.40 %	ISO 62
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.0050 cm/cm	0.0050 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	250 MPa	36300 psi	conditioned; ISO 2039-1
	270 MPa	39200 psi	dry; ISO 2039-1
Tensile Strength at Break	200 MPa	29000 psi	conditioned; ISO 527-1/-2
	220 MPa	31900 psi	dry; ISO 527-1/-2
Elongation at Break	2.0 %	2.0 %	dry; ISO 527-1/-2
	2.0 %	2.0 %	conditioned; ISO 527-1/-2
Tensile Modulus	16.0 GPa	2320 ksi	conditioned; ISO 527-1/-2
	17.0 GPa	2470 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	6.00 J/cm ²	28.6 ft-lb/in ²	conditioned; ISO 179/1eU
	7.00 J/cm ²	33.3 ft-lb/in ²	dry; ISO 179/1eU
	4.00 J/cm ² @Temperature 30.0 °C	19.0 ft-lb/in ² @Temperature 86.0 °F	conditioned; ISO 179/1eU

Mechanical Properties	Metric ¹ /cm ²	English ^{1b} /in ²	Comments
	@Temperature 30.0 °C	@Temperature 86.0 °F	dry; ISO 179/1eU
Charpy Impact, Notched	1.30 J/cm ²	6.19 ft-lb/in ²	conditioned; ISO 179/1eA
	1.40 J/cm ²	6.66 ft-lb/in ²	dry; ISO 179/1eA
	1.40 J/cm ²	6.66 ft-lb/in ²	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	1.50 J/cm ²	7.14 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	15.0 µm/m-°C	8.33 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	70.0 µm/m-°C	38.9 µin/in-°F	ISO 11359-1/-2
Melting Point	255 °C	491 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	100 - 120 °C	212 - 248 °F	long term; EMS
	220 °C	428 °F	short term; EMS
Deflection Temperature at 1.8 MPa (264 psi)	230 °C	446 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	170 °C	338 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	dry; IEC 60093
	1.00e+14 ohm-cm	1.00e+14 ohm-cm	conditioned; IEC 60093
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IEC 60093
Dielectric Strength	28.0 kV/mm	711 kV/in	conditioned; IEC 60243-1
	29.0 kV/mm	737 kV/in	dry; IEC 60243-1
Comparative Tracking Index	225 V	225 V	conditioned; IEC 60112

Descriptive Properties	Value	Comments
Automotive	Air intake sytems	
	Automotive electr. and electronics, lighting	

Descriptive Properties	Value	Comments
	Exterior	
	Interior	
	Powertrain and Chassis	
Electricals & Electronics	Electrical appliances	
	Electrical equipment	
	Energy distribution	
Form	Granules	
Industry & Consumer goods	Housewares	
	Hydraulics & Pneumatics	
	Mechanical Engineering	
	Power transmission	
	Sanitary, water and gas supply	
	Sports & Leisure	
	Tools & Accessories	
Processing	Injection Molding	
Product Attributes	Partially aromatic Polyamide	
Special Characteristics	Improved UV resistance (outdoor use)	
	Light stabilized or stable to light	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China