

EMS-Grivory Grivory® GC-4H PA*-CF40

Category : Polymer , Thermoplastic , Nylon

Material Notes:

Product description: Grivory GC-4H is a 40% carbon-fiber reinforced engineering thermoplastic material based on a combination of semi-crystalline polyamide with partially aromatic copolyamide. Grivory GC-4H is used for injection molding of high performance technical parts, exhibiting exceptional characteristics even after moisture absorption: very high stiffness and strengthdimensional stability, low warpagegood chemical resistanceelectrical and thermal conductivefavorable abrasion and wear propertieslow weight Grivory GC-4H is suitable in the application fields of:Electro /Electronics Safety technologyMechanical engineering Grivory GC-4H is only available in black.Information provided by EMS Grivory

Order this product through the following link:

http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-GC-4H-PA-CF40.php

Physical Properties	Metric	English	Comments
Density	1.34 g/cc	0.0484 lb/in ³	ISO 1183
Water Absorption	4.5 %	4.5 %	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	0.0020 cm/cm	0.0020 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	260 MPa	37700 psi	conditioned; ISO 2039-1
	280 MPa	40600 psi	dry; ISO 2039-1
Tensile Strength at Break	225 MPa	32600 psi	conditioned; ISO 527-1/-2
	260 MPa	37700 psi	dry; ISO 527-1/-2
Elongation at Break	1.5 %	1.5 %	dry; ISO 527-1/-2
	2.0 %	2.0 %	conditioned; ISO 527-1/-2
Tensile Modulus	28.0 GPa	4060 ksi	conditioned; ISO 527-1/-2
	31.0 GPa	4500 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	5.50 J/cm ²	26.2 ft-lb/in ²	dry; ISO 179/1eU
	6.00 J/cm ²	28.6 ft-lb/in ²	conditioned; ISO 179/1eU
	4.50 J/cm ² @Temperature 30.0 °C	21.4 ft-lb/in ² @Temperature 86.0 °F	dry; ISO 179/1eU

Mechanical Properties	Metric ¹ /cm ²	English ¹ lb/in ²	Comments
	@Temperature 30.0 °C	@Temperature 86.0 °F	conditioned; ISO 179/1eU
Charpy Impact, Notched	0.700 J/cm ²	3.33 ft-lb/in ²	dry; ISO 179/1eA
	0.700 J/cm ²	3.33 ft-lb/in ²	conditioned; ISO 179/1eA
	0.400 J/cm ²	1.90 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	0.400 J/cm ²	1.90 ft-lb/in ²	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	10.0 µm/m-°C	5.56 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	80.0 µm/m-°C	44.4 µin/in-°F	ISO 11359-1/-2
Melting Point	260 °C	500 °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)	235 °C	455 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	175 °C	347 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Electrical Properties	Metric	English	Comments
Volume Resistivity	5000 ohm-cm	5000 ohm-cm	dry; IEC 60093
	5000 ohm-cm	5000 ohm-cm	conditioned; IEC 60093
Dielectric Strength	50.0 kV/mm	1270 kV/in	conditioned; IEC 60243-1

Descriptive Properties	Value	Comments
Automotive	Automotive electr. and electronics, lighting	
	Cooling and climate control	
	Interior	
	Powertrain and Chassis	
Electricals & Electronics	Electrical appliances	

Descriptive Properties	Value cal equipment	Comments
Form	Granules	
Industry & Consumer goods	Housewares	
	Hydraulics & Pneumatics	
	Mechanical Engineering	
	Power transmission	
	Sports & Leisure	
	Tools & Accessories	
	Processing	Injection Molding
Product Attributes	Partially aromatic Polyamide	
Special Characteristics	Anti-static	
	Improved heat resistance	
	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