

## EMS-Grivory Grivory® BG-40 FC PA6-GF40

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 40% Glass Fiber Filled

### Material Notes:

Product description: Grilon BG-40 FC is a heat stabilized PA6 injection molding grade with 40% glass fibers. Grilon BG-40 FC has the following important properties: High stiffnessExcellent surface finishShort cycle timesEasy flowingEasy processing Application examples are stressed functional parts with a difficult wall thickness to flow length ratio, such as housings for electro/electronic machines or automotive air ducts.Information provided by EMS Grivory

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_EMS-Grivory-Grivory-BG-40-FC-PA6-GF40.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-BG-40-FC-PA6-GF40.php)

Physical Properties	Metric	English	Comments
Density	1.46 g/cc	0.0527 lb/in <sup>3</sup>	ISO 1183
Water Absorption	7.0 %	7.0 %	ISO 62
Moisture Absorption	1.50 %	1.50 %	ISO 62
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	120 MPa	17400 psi	conditioned; ISO 2039-1
	245 MPa	35500 psi	dry; ISO 2039-1
Tensile Strength at Break	150 MPa	21800 psi	conditioned; ISO 527-1/-2
	230 MPa	33400 psi	dry; ISO 527-1/-2
Elongation at Break	3.0 %	3.0 %	dry; ISO 527-1/-2
	5.0 %	5.0 %	conditioned; ISO 527-1/-2
Tensile Modulus	8.50 GPa	1230 ksi	conditioned; ISO 527-1/-2
	11.6 GPa	1680 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	7.50 J/cm <sup>2</sup>	35.7 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	8.00 J/cm <sup>2</sup>	38.1 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	7.00 J/cm <sup>2</sup>	33.3 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	7.50 J/cm <sup>2</sup>	35.7 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU

Mechanical Properties	@Temperature 30.0 °C Metric	@Temperature 86.0 °F English	Comments
Charpy Impact, Notched	1.20 J/cm <sup>2</sup>	5.71 ft-lb/in <sup>2</sup>	dry; ISO 179/1eA
	2.00 J/cm <sup>2</sup>	9.52 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eA
	0.900 J/cm <sup>2</sup>	4.28 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	18.0 µm/m-°C	10.0 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	92.0 µm/m-°C	51.1 µin/in-°F	ISO 11359-1/-2
Melting Point	222 °C	432 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	110 - 130 °C	230 - 266 °F	long term; EMS
	200 °C	392 °F	short term; EMS
Deflection Temperature at 1.8 MPa (264 psi)	210 °C	410 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	165 °C	329 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	conditioned; IEC 60093
	1.00e+14 ohm-cm	1.00e+14 ohm-cm	dry; IEC 60093
Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	IEC 60093
Dielectric Strength	35.0 kV/mm	889 kV/in	conditioned; IEC 60243-1
	37.0 kV/mm	940 kV/in	dry; IEC 60243-1
Comparative Tracking Index	550 V	550 V	conditioned; IEC 60112

Descriptive Properties	Value	Comments
Automotive	Interior	
	Powertrain and Chassis	
Electricals & Electronics	Connectors	
	Electrical appliances	
	Electrical equipment	

Descriptive Properties	Value	Comments
Industry & Consumer goods	Housewares	
	Mechanical Engineering	
	Sports & Leisure	
	Tools & Accessories	
Processing	Injection Molding	
Product Attributes	Improved flowability and demoulding	

## Contact Songhan Plastic Technology Co.,Ltd.

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