

## EMS-Grivory Grivory® BG-50 S PA6-GF50

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 50% Glass Fiber Filled

### Material Notes:

Product description: Grilon BG-50 S is a heat stabilized PA6 injection molding grade with 50% glass fibers. Grilon BG-50 S has the following important properties: High stiffnessExcellent surface finishEasy flowingEasy processing Application examples are stressed functional parts for automotive applications such as fuel injection rails and steering column switches.Information provided by EMS Grivory

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_EMS-Grivory-Grivory-BG-50-S-PA6-GF50.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-BG-50-S-PA6-GF50.php)

Physical Properties	Metric	English	Comments
Density	1.58 g/cc	0.0571 lb/in <sup>3</sup>	ISO 1183
Water Absorption	5.0 %	5.0 %	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	0.0050 cm/cm	0.0050 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	155 MPa	22500 psi	conditioned; ISO 2039-1
	270 MPa	39200 psi	dry; ISO 2039-1
Tensile Strength at Break	165 MPa	23900 psi	conditioned; ISO 527-1/-2
	245 MPa	35500 psi	dry; ISO 527-1/-2
Elongation at Break	3.0 %	3.0 %	dry; ISO 527-1/-2
	6.0 %	6.0 %	conditioned; ISO 527-1/-2
Tensile Modulus	11.5 GPa	1670 ksi	conditioned; ISO 527-1/-2
	17.5 GPa	2540 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	9.00 J/cm <sup>2</sup>	42.8 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	9.50 J/cm <sup>2</sup>	45.2 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	8.50 J/cm <sup>2</sup>	40.4 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	9.00 J/cm <sup>2</sup>	42.8 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Charpy Impact, Notched Mechanical Properties	1.50 J/cm <sup>2</sup> Metric	7.14 ft-lb/in <sup>2</sup> English	dry; ISO 179/1eA Comments
	2.50 J/cm <sup>2</sup>	11.9 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eA
	1.10 J/cm <sup>2</sup> @Temperature 30.0 °C	5.23 ft-lb/in <sup>2</sup> @Temperature 86.0 °F	dry; ISO 179/1eU
	1.20 J/cm <sup>2</sup> @Temperature 30.0 °C	5.71 ft-lb/in <sup>2</sup> @Temperature 86.0 °F	conditioned; ISO 179/1eU

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	100 µm/m-°C	55.6 µin/in-°F	ISO 11359-1/-2
Melting Point	222 °C	432 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	90.0 - 140 °C	194 - 284 °F	long term; EMS
	160 °C	320 °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	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+12 ohm	1.00e+12 ohm	IEC 60093
Dielectric Strength	37.0 kV/mm	940 kV/in	conditioned; IEC 60243-1
	40.0 kV/mm	1020 kV/in	dry; IEC 60243-1
Comparative Tracking Index	575 V	575 V	conditioned; IEC 60112

Descriptive Properties	Value	Comments
Automotive	Interior	
Electricals & Electronics	Electrical appliances	
	Electrical equipment	
Form	Granules	

Descriptive Properties

Value on Molding

Comments

## Contact Songhan Plastic Technology Co.,Ltd.

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