

## EMS-Grivory Grivory® GV-2 FWA black 9225 PA\*-GF20

Category : Polymer , Thermoplastic , Nylon

### Material Notes:

Product description: Grivory GV-2 FWA black 9225 is a 20% glass fiber reinforced engineering thermoplastic material based on a combination of semicrystalline polyamide with partially aromatic copolyamide. Grivory GV-2 FWA black 9225 is used for injection molding technical parts, exhibiting exceptional characteristics even after moisture absorption: high stiffness and strengthdimensional stability, low warpagegood chemical resistancegood surface finish Grivory GV is the economical alternative to die-cast alloys. Grivory GV-2 FWA black 9225 is a specially heat stabilized material. It is particularly suitable for parts in direct contact with drinking water and food. Grivory GV-2 FWA black 9225 is suitable for all engineering thermoplastic applications with the requirement of approvals in contact with foodstuffs or/and in contact with drinking water.Information provided by EMS Grivory

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_EMS-Grivory-Grivory-GV-2-FWA-black-9225-PA-GF20.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-GV-2-FWA-black-9225-PA-GF20.php)

Physical Properties	Metric	English	Comments
Density	1.28 g/cc	0.0462 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	0.0080 cm/cm	0.0080 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	200 MPa	29000 psi	conditioned; ISO 2039-1
	225 MPa	32600 psi	dry; ISO 2039-1
Tensile Strength at Break	125 MPa	18100 psi	conditioned; ISO 527-1/-2
	145 MPa	21000 psi	dry; ISO 527-1/-2
Elongation at Break	3.0 %	3.0 %	dry; ISO 527-1/-2
	4.0 %	4.0 %	conditioned; ISO 527-1/-2
Tensile Modulus	7.20 GPa	1040 ksi	conditioned; ISO 527-1/-2
	8.20 GPa	1190 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	5.00 J/cm <sup>2</sup>	23.8 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	5.00 J/cm <sup>2</sup>	23.8 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	3.50 J/cm <sup>2</sup>	16.7 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU

Mechanical Properties	@Temperature 30.0 °C Metric	@Temperature 86.0 °F English	Comments
	3.50 J/cm <sup>2</sup>	16.7 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
Charpy Impact, Notched	0.700 J/cm <sup>2</sup>	3.33 ft-lb/in <sup>2</sup>	dry; ISO 179/1eA
	0.700 J/cm <sup>2</sup>	3.33 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eA
	0.600 J/cm <sup>2</sup>	2.86 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	0.600 J/cm <sup>2</sup>	2.86 ft-lb/in <sup>2</sup>	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	100 µm/m-°C	55.6 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)	230 °C	446 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	65.0 °C	149 °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	33.0 kV/mm	838 kV/in	dry; IEC 60243-1
	33.0 kV/mm	838 kV/in	conditioned; IEC 60243-1
Comparative Tracking Index	575 V	575 V	conditioned; IEC 60112

Descriptive Properties	Value	Comments
Food contact	EU Requirements	

Descriptive Properties	FDA Value	Comments
Form	Granules	
Industry & Consumer goods	Housewares	
	Hydraulics & Pneumatics	
	Mechanical Engineering	
	Power transmission	
	Sanitary, water and gas supply	
Processing	Injection Molding	
Product Attributes	Partially aromatic Polyamide	
Water Contact	ACS	
	DVGW W270	
	KTW	
	NSF 61	
	WRAS	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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