

## EMS-Grivory Grivory® GV-6 FWA black 9225 PA\*-GF60

Category : Polymer , Thermoplastic , Nylon

### Material Notes:

Product description: Grivory GV-6 FWA black 9225 is a 60% glass-fiber reinforced engineering thermoplastic material based on a combination of semi-crystalline Polyamide with partially aromatic copolyamide. Grivory GV-6 FWA black 9225 is used for injection molding technical parts, exhibiting exceptional characteristics even after moisture absorption: high stiffness and strength dimensional stability, low warpage good chemical resistance good surface finish Grivory GV is the economical alternative to die-cast alloys. Grivory GV-6 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-6 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-6-FWA-black-9225-PA-GF60.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-GV-6-FWA-black-9225-PA-GF60.php)

Physical Properties	Metric	English	Comments
Density	1.69 g/cc	0.0611 lb/in <sup>3</sup>	ISO 1183
Water Absorption	3.5 %	3.5 %	ISO 62
Moisture Absorption	1.20 %	1.20 %	ISO 62
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.0030 cm/cm	0.0030 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	290 MPa	42100 psi	conditioned; ISO 2039-1
	315 MPa	45700 psi	dry; ISO 2039-1
Tensile Strength at Break	240 MPa	34800 psi	conditioned; ISO 527-1/-2
	260 MPa	37700 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	21.0 GPa	3050 ksi	conditioned; ISO 527-1/-2
	22.0 GPa	3190 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	8.00 J/cm <sup>2</sup>	38.1 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
	8.00 J/cm <sup>2</sup>	38.1 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU

Mechanical Properties	@Temperature 30.0 °C Metric	@Temperature 86.0 °F English	Comments
	8.00 J/cm <sup>2</sup>	38.1 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
Charpy Impact, Notched	1.40 J/cm <sup>2</sup>	6.66 ft-lb/in <sup>2</sup>	dry; ISO 179/1eA
	1.40 J/cm <sup>2</sup>	6.66 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eA
	1.30 J/cm <sup>2</sup>	6.19 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	1.30 J/cm <sup>2</sup>	6.19 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	15.0 µm/m-°C	8.33 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	90.0 µm/m-°C	50.0 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	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	600 V	600 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.

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