

## EMS-Grivory Grivory® HT2V-3X V0 nat 6059 PA6T/66-GF30

Category : Polymer , Thermoplastic , Nylon , Nylon 6/66 , Nylon 66/6 , 30% Glass Fiber Reinforced

### Material Notes:

**Product description:** Grivory HT2V-3X V0 is a 30% glass-fiber reinforced flame retardant (UL 94 V-0) engineering thermoplastic material based on a semi-crystalline, partially aromatic copolyamide. Grivory HT2V-3X V0 is halogen free and free of red phosphorous. RoHS: Grivory HT2V-3X V0 is in compliance with RoHS (2002/95/EC, Restriction of Hazardous Substances) WEEE: Parts produced from Grivory HT2V-3X V0 are not subject to "selective treatment" according the Directive 2002/96/EC on Waste Electrical and Electronic Equipment. ISO polymer designation: PA 6T/66 ASTM-designation: PPA, polyphthalamide. The main distinguishing feature of Grivory HT, when compared to other polyamides, is its good performance at high temperatures providing parts which are stiffer, stronger and have better heat distortion stability and chemical resistance. Grivory HT2V-3X V0 is especially suitable for injection molded parts in electrical and electronic applications with high requirements and a material flame class acc. UL 94 V-0. The Material is suitable for lead-free SMT reflow soldering acc. e.g. JEDEC J-STD-020C (peak temperature 260°C). Components conforming to JEDEC MSL2 are achievable. Information provided by EMS Grivory

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_EMS-Grivory-Grivory-HT2V-3X-V0-nat-6059-PA6T66-GF30.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-HT2V-3X-V0-nat-6059-PA6T66-GF30.php)

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in <sup>3</sup>	ISO 1183
Water Absorption	3.5 %	3.5 %	ISO 62
Moisture Absorption	1.30 %	1.30 %	ISO 62
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.0090 cm/cm	0.0090 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	230 MPa	33400 psi	conditioned; ISO 2039-1
	240 MPa	34800 psi	dry; ISO 2039-1
Tensile Strength at Break	130 MPa	18900 psi	conditioned; ISO 527-1/-2
	140 MPa	20300 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	10.5 GPa	1520 ksi	conditioned; ISO 527-1/-2
	10.5 GPa	1520 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	4.00 J/cm <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU

Mechanical Properties	Metric <sup>1</sup> /cm <sup>2</sup>	English <sup>1</sup> lb/in <sup>2</sup>	Comments <sup>1</sup> ; ISO 179/1eU
	3.50 J/cm <sup>2</sup>	16.7 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	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	25.0 µm/m-°C	13.9 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	45.0 µm/m-°C	25.0 µin/in-°F	ISO 11359-1/-2
Melting Point	310 °C	590 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	150 °C	302 °F	long term; EMS
	240 °C	464 °F	short term; EMS
Deflection Temperature at 1.8 MPa (264 psi)	280 °C	536 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	190 °C	374 °F	ISO 75-1/-2
Flammability, UL94	V-0	V-0	IEC 60695-11-10
	5VA	5VA	IEC 60695-11-20
	V-0	V-0	IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	
Oxygen Index	35 %	35 %	ISO 4589-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	dry; IEC 60093
	1.00e+12 ohm-cm	1.00e+12 ohm-cm	conditioned; IEC 60093
Surface Resistance	1.00e+11 ohm	1.00e+11 ohm	IEC 60093

Electrical Properties	Metric	English	Comments
<b>Dielectric Strength</b>	<b>34.0 kV/mm</b>	<b>864 kV/in</b>	<b>dry, IEC 60243-1</b>
	34.0 kV/mm	864 kV/in	conditioned; IEC 60243-1
<b>Comparative Tracking Index</b>	<b>600 V</b>	<b>600 V</b>	<b>conditioned; IEC 60112</b>

Descriptive Properties	Value	Comments
Automotive	Automotive electr. and electronics, lighting	
	Interior	
Electricals & Electronics	Connectors	
	Electrical appliances	
	Electrical equipment	
	Energy distribution	
	Lighting	
	Mobile phones and other portable devices	
Form	Granules	
Industry & Consumer goods	Hydraulics & Pneumatics	
	Mechanical Engineering	
	Power transmission	
	Tools & Accessories	
Processing	Injection Molding	
Product Attributes	Co Polyamide	
	Improved alcohol resistance	
	Improved flowability and demoulding	
	Partially aromatic Polyamide	
Special Characteristics	Flame retardant	
	Improved heat resistance	

## Contact Songhan Plastic Technology Co.,Ltd.

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