

EMS-Grivory Grivory® HT3Z LF black 9564 PA*

Category : Polymer , Thermoplastic , Nylon

Material Notes:

Product description: Grivory HT3Z LF is an unreinforced and impact resistant, PTFE modified engineering thermoplastic based on semi crystalline partially aromatic copolyamide. This Grivory HT product is partially based on renewable raw materials. ISO polymer designation: PA 10T/X ASTM designation: PPA, polyphthalamide Grivory HT3Z LF is especially used in tribological applications. Grivory HT3Z LF exhibits low moisture absorption, high stiffness and high heat distortion temperature. The PTFE (polytetrafluoroethylene) modification reduces the sliding friction after a short initial phase. As each tribological system has its own properties (material combination, temperature, force etc.), the suitability of the product has to be tested for each application under practical conditions. Information provided by EMS Grivory

Order this product through the following link:

http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-HT3Z-LF-black-9564-PA.php

Physical Properties	Metric	English	Comments
Density	1.19 g/cc	0.0430 lb/in ³	ISO 1183
Water Absorption	2.5 %	2.5 %	ISO 62
Moisture Absorption	1.40 %	1.40 %	ISO 62
Linear Mold Shrinkage, Flow	0.018 cm/cm	0.018 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.012 cm/cm	0.012 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	140 MPa	20300 psi	dry; ISO 2039-1
	140 MPa	20300 psi	conditioned; ISO 2039-1
Tensile Strength at Break	75.0 MPa	10900 psi	conditioned; ISO 527-1/-2
	80.0 MPa	11600 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	2.70 GPa	392 ksi	dry; ISO 527-1/-2
	2.80 GPa	406 ksi	conditioned; ISO 527-1/-2
Charpy Impact Unnotched	9.50 J/cm ²	45.2 ft-lb/in ²	conditioned; ISO 179/1eU
	10.0 J/cm ²	47.6 ft-lb/in ²	dry; ISO 179/1eU
	9.00 J/cm ²	42.8 ft-lb/in ²	conditioned; ISO 179/1eU

Mechanical Properties	@Temperature 30.0 °C Metric	@Temperature 86.0 °F English	Comments
	9.50 J/cm ²	45.2 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	dry; ISO 179/1eA
	0.600 J/cm ²	2.86 ft-lb/in ²	conditioned; ISO 179/1eA
	0.600 J/cm ²	2.86 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	0.600 J/cm ²	2.86 ft-lb/in ²	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 µm/m-°C	44.4 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	80.0 µm/m-°C	44.4 µin/in-°F	ISO 11359-1/-2
Melting Point	295 °C	563 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	140 °C	284 °F	long term; EMS
	240 °C	464 °F	short term; EMS
Deflection Temperature at 1.8 MPa (264 psi)	110 °C	230 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	85.0 °C	185 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

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
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	400 V	400 V	conditioned; IEC 60112

Descriptive Properties	Value	Comments
Automotive	Air intake systems	

Descriptive Properties	Compressed air systems Value	Comments
	Cooling and climate control	
	Fuel systems	
	Hydraulic systems	
	Interior	
	Powertrain and Chassis	
Electricals & Electronics	Electrical appliances	
	Electrical equipment	
Form	Granules	
Industry & Consumer goods	Hydraulics & Pneumatics	
	Mechanical Engineering	
	Power transmission	
	Tools & Accessories	
Processing	Injection Molding	
Product Attributes	Bio based Polyamide	
	Co Polyamide	
	Hydrolysis resistant	
	Improved alcohol resistance	
	Partially aromatic Polyamide	
Special Characteristics	Improved heat resistance	
	Platable	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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