

EMS-Grivory Grivory® TSG-50/4 W PA666-GF50

Category : Polymer , Thermoplastic , Nylon , Nylon 6/66 , Nylon 66/6 , 40% Glass Fiber Reinforced

Material Notes:

Product description: Grilon TSG-50/4 W is a high heat stabilized, normal viscosity PA66 + PA6 injection molding grade with 50% glass fibers, modified for parts with high thermal demands. Grilon TSG-50/4 W has the following important properties: High stiffnessExcellent flow behaviorExcellent oil resistanceVery good processingHigh heat ageing resistance Application examples are stiff injection molding parts with high resistance against heat ageing such as functional parts in the Automotive Cooling-, Heating-, and Climatic System. Part examples are charged air cooler housings and oil sump housings in the engine compartment. Information provided by EMS Grivory

Order this product through the following link:

http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-TSG-504-W-PA666-GF50.php

Physical Properties	Metric	English	Comments
Density	1.55 g/cc	0.0560 lb/in ³	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	0.0030 cm/cm	0.0030 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	150 MPa	21800 psi	conditioned; ISO 2039-1
	270 MPa	39200 psi	dry; ISO 2039-1
Tensile Strength at Break	150 MPa	21800 psi	conditioned; ISO 527-1/-2
	230 MPa	33400 psi	dry; ISO 527-1/-2
Elongation at Break	2.5 %	2.5 %	dry; ISO 527-1/-2
	5.0 %	5.0 %	conditioned; ISO 527-1/-2
Tensile Modulus	12.0 GPa	1740 ksi	conditioned; ISO 527-1/-2
	16.5 GPa	2390 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	9.00 J/cm ²	42.8 ft-lb/in ²	dry; ISO 179/1eU
	10.0 J/cm ²	47.6 ft-lb/in ²	conditioned; ISO 179/1eU
	8.00 J/cm ²	38.1 ft-lb/in ²	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	9.00 J/cm ²	42.8 ft-lb/in ²	

Mechanical Properties	Metric @ Temperature 30.0 °C	English @ Temperature 86.0 °F	dry; ISO 179/1eU Comments
Charpy Impact, Notched	1.40 J/cm ²	6.66 ft-lb/in ²	dry; ISO 179/1eA
	1.80 J/cm ²	8.57 ft-lb/in ²	conditioned; ISO 179/1eA
	1.20 J/cm ² @Temperature 30.0 °C	5.71 ft-lb/in ² @Temperature 86.0 °F	conditioned; ISO 179/1eU
	1.30 J/cm ² @Temperature 30.0 °C	6.19 ft-lb/in ² @Temperature 86.0 °F	dry; 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	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	130 - 150 °C	266 - 302 °F	long term; EMS
	230 °C	446 °F	short term; EMS
Deflection Temperature at 1.8 MPa (264 psi)	250 °C	482 °F	ISO 75-1/-2
Deflection Temperature at 8.0 MPa	215 °C	419 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	conditioned; IEC 60093
	1.00e+14 ohm-cm	1.00e+14 ohm-cm	dry; IEC 60093
Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	IEC 60093
Dielectric Strength	22.0 kV/mm	559 kV/in	conditioned; IEC 60243-1
	27.0 kV/mm	686 kV/in	dry; IEC 60243-1
Comparative Tracking Index	525 V	525 V	conditioned; IEC 60112

Descriptive Properties	Value	Comments
Automotive	Air intake systems	
	Automotive electr. and electronics, lighting	
	Cooling and climate control	

Descriptive Properties	Value	Comments
	Hydraulic systems	
Electricals & Electronics	Lighting	
Form	Granules	
Industry & Consumer goods	Heating systems	
	Hydraulics & Pneumatics	
	Mechanical Engineering	
	Sports & Leisure	
Processing	Injection Molding	
Special Characteristics	Improved heat resistance	

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