

## EMS-Grivory Grivory® TSC-30/4 LF 15 black 9832 PA666-(CF+Z)45

Category : Polymer , Thermoplastic , Nylon , Nylon 6/66

### Material Notes:

Product description: Grilon TSC-30/4 LF 15 is a heat stabilized, normal viscosity PA66 + PA6 injection molding grade with 30% carbon fibers and 15% of a combination of PTFE and silicone oil. Grilon TSC-30/4 LF 15 has the following important properties: Electrical conductiveVery high stiffnessExcellent sliding friction characteristics Grilon TSC-30/4 LF 15 is used typically for slide bearing applications such as shaft bearing rings, gears, and planetary gears.Information provided by EMS Grivory

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_EMS-Grivory-Grivory-TSC-304-LF-15-black-9832-PA666-CFZ45.php](http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-TSC-304-LF-15-black-9832-PA666-CFZ45.php)

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 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	0.0010 cm/cm	0.0010 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	120 MPa	17400 psi	conditioned; ISO 2039-1
	210 MPa	30500 psi	dry; ISO 2039-1
Tensile Strength at Break	170 MPa	24700 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
	4.5 %	4.5 %	conditioned; ISO 527-1/-2
Tensile Modulus	16.0 GPa	2320 ksi	conditioned; ISO 527-1/-2
	23.0 GPa	3340 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	4.50 J/cm <sup>2</sup>	21.4 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	6.00 J/cm <sup>2</sup>	28.6 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU
	4.50 J/cm <sup>2</sup>	21.4 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	4.50 J/cm <sup>2</sup>	21.4 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eU

Mechanical Properties	@Temperature 30.0 °C Metric	@Temperature 86.0 °F English	Comments
Charpy Impact, Notched	1.00 J/cm <sup>2</sup>	4.76 ft-lb/in <sup>2</sup>	dry; ISO 179/1eA
	1.30 J/cm <sup>2</sup>	6.19 ft-lb/in <sup>2</sup>	conditioned; ISO 179/1eA
	0.700 J/cm <sup>2</sup>	3.33 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	0.700 J/cm <sup>2</sup>	3.33 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	80.0 µm/m-°C	44.4 µin/in-°F	ISO 11359-1/-2
Melting Point	260 °C	500 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	90.0 - 120 °C	194 - 248 °F	long term; EMS
	200 °C	392 °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	130 °C	266 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Electrical Properties	Metric	English	Comments
Volume Resistivity	1e+05	1e+05	dry; IEC 60093
	1e+05	1e+05	conditioned; IEC 60093
Surface Resistance	1000 ohm	1000 ohm	IEC 60093

Descriptive Properties	Value	Comments
Automotive	Automotive electr. and electronics, lighting	
	Powertrain and Chassis	
Electricals & Electronics	Electrical appliances	
	Electrical equipment	
Form	Granules	
Industry & Consumer goods	Mechanical Engineering	

Descriptive Properties	Value	Comments
	Sports & Leisure	
	Tools & Accessories	
Processing	Injection Molding	
Product Attributes	Improved friction & wear properties	
Special Characteristics	Anti-static	

## Contact Songhan Plastic Technology Co.,Ltd.

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