

EMS-Grivory Grivory® XE 4128 black 9221 PA610

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Nylon , Nylon 610

Material Notes:

Product description: Grilamid XE 4128 black 9221 is a modified high viscosity Polyamide 610 for extrusion as well as injection molding. A characteristic of tubes made out of this material is the high resistance to collapse under the influence of vacuum and high temperatures. PA610 polymer is to a large extent based on renewable raw materials and its eco-profile is very favorable when compared to similar products based on crude oil. The main features of Grilamid XE 4128 black 9221 are: high flexibility and impact resistance at low temperatureshigh stiffness at high temperatureshigh heat and chemical resistanceeasy processing Grilamid XE 4128 black 9221 can be processed on standard tube extrusion lines suitable for polyamides. Application examples: Grilamid XE 4128 black 9221 was developed for automotive tubing applications subject to high continuous use and peak temperatures. The material is particularly indicated for brake booster vacuum lines of passenger cars.Information provided by EMS Grivory

Order this product through the following link:

http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-XE-4128-black-9221-PA610.php

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in ³	ISO 1183
Water Absorption	1.8 %	1.8 %	ISO 62
Moisture Absorption	4.80 %	4.80 %	ISO 62
Linear Mold Shrinkage, Flow	0.012 cm/cm	0.012 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.011 cm/cm	0.011 in/in	ISO 294-4, 2577

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	35.0 MPa	5080 psi	conditioned; ISO 2039-1
	60.0 MPa	8700 psi	dry; ISO 2039-1
Tensile Strength at Break	30.0 MPa	4350 psi	conditioned; ISO 527-1/-2
	35.0 MPa	5080 psi	dry; ISO 527-1/-2
Tensile Strength, Yield	35.0 MPa	5080 psi	dry; ISO 527-1/-2
	35.0 MPa	5080 psi	dry; ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	dry; ISO 527-1/-2
	>= 50 %	>= 50 %	conditioned; ISO 527-1/-2
Elongation at Yield	10 %	10 %	dry; ISO 527-1/-2
	10 %	10 %	dry; ISO 527-1/-2

Tensile Modulus Mechanical Properties	0.700 GPa Metric	102 ksi English	conditioned; ISO 527-1/-2 Comments
	1.20 GPa	174 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	NB	NB	dry; ISO 179/1eU
	NB	NB	conditioned; ISO 179/1eU
	NB	NB	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	NB	NB	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
Charpy Impact, Notched	NB	NB	dry; ISO 179/1eA
	NB	NB	conditioned; ISO 179/1eA
	1.70 J/cm²	8.09 ft-lb/in²	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	1.80 J/cm²	8.57 ft-lb/in²	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	100 µm/m-°C	55.6 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	150 µm/m-°C	83.3 µin/in-°F	ISO 11359-1/-2
Melting Point	220 °C	428 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	80.0 °C	176 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	50.0 °C	122 °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	conditioned; IEC 60093
	1.00e+13 ohm-cm	1.00e+13 ohm-cm	dry; IEC 60093
Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	IEC 60093
Dielectric Strength	32.0 kV/mm	813 kV/in	conditioned; IEC 60243-1
	33.0 kV/mm	838 kV/in	dry; IEC 60243-1

Comparative Tracking Index Electrical Properties	600 V Metric	600 V English	conditioned; IEC 60112 Comments
Descriptive Properties	Value		Comments
Automotive	Air intake sytems		
	Compressed air systems		
	Hydraulic systems		
Form	Granules		
Industry & Consumer goods	Hydraulics & Pneumatics		
Processing	Other Extrusion		
Product Attributes	Bio based Polyamide		
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