

EMS-Grivory Grivory® XE 3959 black 9992 PA610

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

Material Notes:

Product description: Grilamid XE 3959 is a high viscosity Polyamide 610 especially suitable for extrusion applications. This PA610 product 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 3959 are: Low volume expansion of tubes under pressureGood cold impact behaviorHigh heat and chemical resistanceEasy processing Grilamid XE 3959 can be processed on standard tube-extrusion lines suitable for polyamidesApplication examples: Grilamid XE 3959 was specially developed for automotive tubing applications for which a high long term usage and peak temperature are required. Grilamid XE 3959 has an excellent volume expansion behavior and is particularly suitable for hydraulic clutch tubes.Information provided by EMS Grivory

Order this product through the following link:

http://www.lookpolymers.com/polymer_EMS-Grivory-Grivory-XE-3959-black-9992-PA610.php

Physical Properties	Metric	English	Comments
Density	1.07 g/cc	0.0387 lb/in ³	ISO 1183
Water Absorption	3.3 %	3.3 %	ISO 62
Moisture Absorption	1.60 %	1.60 %	ISO 62
Linear Mold Shrinkage, Flow	0.0090 cm/cm	0.0090 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	70.0 MPa	10200 psi	conditioned; ISO 2039-1
	120 MPa	17400 psi	dry; ISO 2039-1
Tensile Strength at Break	40.0 MPa	5800 psi	dry; ISO 527-1/-2
	60.0 MPa	8700 psi	conditioned; ISO 527-1/-2
Tensile Strength, Yield	45.0 MPa	6530 psi	dry; ISO 527-1/-2
	60.0 MPa	8700 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	5.0 %	5.0 %	dry; ISO 527-1/-2
	18 %	18 %	conditioned; ISO 527-1/-2
Tensile Modulus	1.20 GPa	174 ksi	conditioned; ISO 527-1/-2

Mechanical Properties	Metric	English	Comments
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	0.800 J/cm ²	3.81 ft-lb/in ²	dry; ISO 179/1eA
	1.80 J/cm ²	8.57 ft-lb/in ²	conditioned; ISO 179/1eA
	0.800 J/cm ²	3.81 ft-lb/in ²	conditioned; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	
	0.900 J/cm ²	4.28 ft-lb/in ²	dry; ISO 179/1eU
	@Temperature 30.0 °C	@Temperature 86.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	110 µm/m-°C	61.1 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	110 µm/m-°C	61.1 µin/in-°F	ISO 11359-1/-2
Melting Point	220 °C	428 °F	10°C/min; ISO 11357-1/-3
Maximum Service Temperature, Air	110 - 130 °C	230 - 266 °F	long term; EMS
	160 °C	320 °F	short term; EMS
Deflection Temperature at 0.46 MPa (66 psi)	150 °C	302 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	55.0 °C	131 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+11 ohm-cm	1.00e+11 ohm-cm	dry; IEC 60093
	1.00e+11 ohm-cm	1.00e+11 ohm-cm	conditioned; IEC 60093
Surface Resistance	1.00e+11 ohm	1.00e+11 ohm	IEC 60093
Dielectric Strength	34.0 kV/mm	864 kV/in	conditioned; 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		
	Fuel systems		
	Hydraulic systems		
	Powertrain and Chassis		
Electricals & Electronics	Cables & Tubes		
Form	Granules		
Industry & Consumer goods	Hydraulics & Pneumatics		
	Mechanical Engineering		
	Sports & Leisure		
	Tools & Accessories		
Processing	Other Extrusion		
	Profile Extrusion		
Product Attributes	Bio based Polyamide		
	High viscosity		
Special Characteristics	High impact or impact modified		
	Improved heat resistance		
	Improved UV resistance (outdoor use)		
	Light stabilized or stable to light		

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