

Elastever® E1120GF 20TF-85D

Material Description:

Elastever® E1120GF 20TF-85D is a Thermoplastic Polyurethane Elastomer(TPU-polyether) product filled with 20% glass fiber and 20% PTFE.Characteristics include:Lubricated.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
	• Europe	• Latin America
	• Middle East	• Africa
Filler/Reinforcement	• Glass Fiber, 20% Filler by Weight	
Additive	• PTFE Lubricant: 20%	
Features	• Lubricated	• Ageing Resistant
	• Cold Resistant	• Oil Resistant
	• Wear Resistant	
Appearance	• Black	• Natural Color
Forms	• Pellets	
RoHS Compliance	• RoHS Compliant	
Processing Method	• Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.52	g/cm ³	ASTM D792
Water Absorption (23°C, 24 hr)	0.15	%	ASTM D570
Molding Shrinkage - Flow (3.18 mm)	0.2	%	ASTM D955

Hardness	Typical Value	Unit	Test Method
Durometer Hardness (Shore D)	85		ASTM D2240

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	5800	MPa	ASTM D638
Tensile Strength	71	MPa	ASTM D638
Tensile Elongation(Break)	8	%	ASTM D638
Flexural Modulus	4400	MPa	ASTM D790
Flexural Strength	115	MPa	ASTM D790
Coefficient of Friction vs. Metal - Dynamic	0.25		ASTM D1894

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact(3.18mm)	120	J/m	ASTM D256
Unnotched Izod Impact(3.18mm)	800	J/m	ASTM D4812

Flammability	Typical Value	Unit	Test Method
Flame Rating (1.6mm)	HB		UL 94

Electrical Properties	Typical Value	Unit	Test Method
Volume Resistivity	1.00E+11	Ohms·cm	ASTM D257

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa,Unannealed	127	°C	
1.8 MPa, Unannealed	76	°C	
CLTE - Flow	7.20E-05	cm/cm/°C	ASTM D696
Thermal Conductivity	0.36	W/m/K	ASTM C177

Processing Information	Typical Value	Unit
Rear Temperature	182 to 210	°C
Middle Temperature	182 to 210	°C
Front Temperature	182 to 210	°C
Mold Temperature	16 to 66	°C
Injection Pressure	68.9 to 103	MPa

Additional Information

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 4mil/in.

NFD ADVANCED COMPOSITES

Elastever® E1120GF 20TF-85D

CAUTION/警告!

Before using, read the Molding Guide, Material Safety Data Sheets, and Bulletins available from NFD Advanced Composites Sales offices and Distributors supplied to your company. Caution! During drying, purging and molding, small amounts of hazardous gases and/or particulate matter may be released. These may irritate eyes, nose and throat. Use adequate local exhaust ventilation during thermal processing. To prevent resin decomposition, do not contaminate the resin or exceed the recommended melt temperature or hold-up time. Avoid inhalation or skin and eyes contact. Sweep up and dispose of spilled resin to eliminate slipping hazard. 在使用之前，请阅读NFD公司销售办事处和经销商提供给贵公司的材料成型指南、材料安全数据表和公告。警告！在干燥、吹扫和成型过程中，少量有害气体或颗粒物可能会在被释放，这些可能会刺激眼睛，鼻子和喉咙。热处理过程中请注意做好排气通风工作。为防止树脂分解，请勿污染树脂或超过我们为您推荐熔融温度或时间。请避免吸入或与皮肤、眼睛等接触。清扫和处理溢出的树脂，以消除滑到的危险。

LEGAL NOTICES/法律声明

The figures indicated here are approximate values. They may be affected by different factors, and the user is not released therefore from the obligation of performing checks and trials of his own. The values indicated here have been compiled on the basis of current tests and findings. Any legally binding guarantee of certain properties, or any suitability for a specific application can not be inferred from the present data. For detailed production regulatory information, contact customer service.

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