

Elastever® E3000 GF CM

Material Description:

Elastever® E3000 GF CM is a Thermoplastic Polyester Elastomer (TPEE) product filled with glass fiber and Mineral. Characteristics include: Flame Retardant, Environmental Protection.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific
	• Europe
	• Middle East
Filler/Reinforcement	• Glass\Mineral
	• Flame Retardant
	• Heat Resistant
Features	• Impact Resistant
	• Oil Resistant
	• Shock Absorption
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding
	• North America
	• Latin America
	• Africa
	• Fatigue Resistant
	• Chemical Resistant
	• Good Processability

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.81	g/cm ³	ASTM D792
	1.8	g/cm ³	
Molding Shrinkage			ASTM D955
Flow:24 hr	0.3 to 0.5	%	
Across Flow:24 hr	1 to 3	%	
Water Absorption			ASTM D570
	24 hr, 50% RH	0.02	
Equilibrium, 23°C, 50% RH	0.03	%	ISO 62

Mechanical Properties	Typical Value	Unit	Test Method	
Tensile Modulus	14000	MPa	ASTM D638	
	13200	MPa	ISO 527-2/1	
Tensile Strength			ASTM D638	
	Break, Type I, 5.0 mm/min	93		MPa
Break	90	MPa	ISO 527-2/5	
Tensile Strain			ISO 527-2/5	
	Yield	1.2		%
	Break, Type I, 5.0 mm/min	1.5		%
Break	1.5	%	ISO 527-2/5	
Flexural Modulus			ASTM D790	
	50.0 mm Span, 1.3 mm/min	12000		MPa
2.0 mm/min	11800	MPa	ISO 178	
Flexural Stress			ISO 178	
	50.0 mm Span, 1.3 mm/min	146		MPa
	145	MPa	ASTM D790	

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact			ASTM D256
	23°C	19	
23°C, 80*10*4	5	KJ/m ²	ISO 180/1A
Unnotched Izod Impact			ASTM D4812
	23°C	345	

23°C,80*10*4	22	KJ/m ²	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	8.5	J	ASTM D3763
	1.8	J	ISO 6603-2

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa,Unannealed,3.2mm	221	°C	ASTM D648
0.45 MPa,Unannealed 64mm Span,80*10*4 mm	217	°C	ISO 75-2/Bf
1.8 MPa, Unannealed,3.2mm	205	°C	ASTM D648
1.8 MPa, Unannealed 64mm Span,80*10*4 mm	197	°C	ISO 75-2/ Af
CLTE			ASTM D696
Flow:-30 to 30°C	2.10E-05	cm/cm/°C	
Transverse:-30 to 30°C	5.00E-05	cm/cm/°C	

Processing Information	Typical Value	Unit
Processing (Melt) Temp	249 to 277	°C
Mold Temperature	82 to 93	°C
Drying Temperature	121 to 149	°C
Drying Time	4	hr
Suggested Max Moisture	0.02	%
Rear Temperature	232 to 243	°C
Middle Temperature	249 to 260	°C
Front Temperature	266 to 277	°C
Screw Speed	30 to 60	rpm
Back Pressure	0.172 to 0.344	MPa

NFD ADVANCED COMPOSITES

Elastever® E3000 GF CM

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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