

## Elastever® E3015TF CL-56D

### Material Description:

Elastever® E3015TF CL-56D is a Thermoplastic Polyester Elastomer (TPEE) product filled with 15% PTFE. Characteristics include: Lubricated, Low to No Outgassing.

### General

Material Status	• Commercial: Active
Availability	• Asia Pacific
	• Europe
	• Middle East
Additive	• PTFE Lubricant: 15%
	• Lubricated
	• Low to No Outgassing
Features	• Low (to None) Ion Content
	• Impact Resistant
	• Environmental Protection
	• Oil Resistant
	• Shock Absorption
	• RoHS Compliant
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.27	g/cm <sup>3</sup>	ASTM D792, ISO 1183
Molding Shrinkage			
Flow: 24 hr	1.5 to 1.7	%	ASTM D955
Across Flow: 24 hr	1.7 to 1.9	%	ASTM D955
Across Flow: 24 hr	1.8	%	ISO 294-4
Flow: 24 hr	1.6	%	ISO 294-4
Water Absorption			
24 hr, 23°C <sup>1</sup>	0.2	%	ASTM D570
Saturation, 23°C	0.5	%	ISO 62

Hardness	Typical Value	Unit	Test Method
Durometer Hardness (Shore D)	56		ASTM D2240

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus			
50 mm/min	300	MPa	ASTM D638
	290	MPa	ISO 527-2/1
Tensile Strength(Break)	23	MPa	ASTM D638
Tensile Elongation			
Break	> 400	%	ASTM D638
Break	> 450	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span, 1.3 mm/min	306	MPa	ASTM D790
2.0 mm/min	295	MPa	ISO 178
Flexural Strength			
	21	MPa	ASTM D790
	23	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact(23°C)	155	J/m	ASTM D256
Unnotched Izod Impact			
23°C	590	J/m	ASTM D4812
23°C, 80*10*3	48	KJ/m <sup>2</sup>	ISO 180/1U

Flammability	Typical Value	Unit	Test Method
Flame Rating(1.0mm)	HB		UL 94

Thermal Properties	Typical Value	Unit	Test Method
Heat Deflection Temperature 0.45 MPa,Unannealed,6.4mm	85	°C	ASTM D648
0.45 MPa,Unannealed 64mm Span,80*10*4 mm	88	°C	ISO 75-2/Bf
1.8 MPa, Unannealed,6.4mm	54	°C	ASTM D648
1.8 MPa, Unannealed 64mm Span,80*10*4 mm	57	°C	ISO 75-2/ Af
CLTE			ASTM E831,ISO 11359-2
Flow:-40 to 40°C	1.10E-04	cm/cm/°C	
Transverse:-40 to 40°C	1.80E-04	cm/cm/°C	

Processing Information	Typical Value	Unit
Processing (Melt) Temp	216 to 238	°C
Mold Temperature	27 to 54	°C
Drying Temperature	82	°C
Drying Time	4	hr
Suggested Max Moisture	0.1	%
Rear Temperature	182 to 193	°C
Middle Temperature	204 to 216	°C
Front Temperature	227 to 238	°C
Screw Speed	30 to 60	rpm
Back Pressure	0.172 to 0.344	MPa

## NOTES:

<sup>1</sup> Results measured at 48 hrs

## NFD ADVANCED COMPOSITES

Elastever® E3015TF CL-56D

## 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的热处理温度或时间。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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## COMPANY/公司:

welcome to NFD, where the concept of "New Formula Designer" is upheld and scientific innovation and production are intertwined. Whether you are a designer, engineer or procurement expert, we can help you expand your business and get new inspiration. We adhere to the core values of credibility and integrity, cooperation, efficiency, and innovation, and always put our customers first. Compared with our competitors, we focus on providing more advanced technical formulation, better quality products, more efficient solutions and more thoughtful after-sales services. We understand the markets, the products, and you even more.

感谢您访问新孚达 (NFD)! 我们秉承"New Formula Designer"的发展理念, 将科研创新与生产应用紧密相连, 无论您是设计师、工程师或者是采购专家, 我们都可以帮助您拓展业务并获得新的灵感。我们坚持诚信、合作、效率、创新的核心价值观, 始终把客户放在第一位。相比于我们的竞争对手, 我们专注于为您提供更先进的技术配方、更优质的产品, 更好的解决方案及更周到的售后服务, 我们懂市场、我们懂产品、我们更懂你们。

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