

**Matreial Data Sheet** 

技术数据表

3mm

NFD Composite Material (Jiangsu) Co., Ltd

# Tepla® T3050GF

## Material Description:

Tepla® T3050GF is a Liquid Crystal Polymer (LCP) product filled with 50% glass fiber. Characteristics include: Heat Resistant, High Stiffness.

Stiffness.				_
General				
Material Status	Commercial: Active			
	Asia Pacific		North America	
Availability	• Europe		Latin America	
	Middle East		Africa	
Filler/Reinforcemen	Glass Fiber, 50% Filler by W	/eight	7111100	
Tillett Keither eether.	High Stiffness		Heat resistance	
	Creep resistance		Flame Retardant	
	Chemical Resistant		High Flow	
Features	Corrosion Resistant		Electrical Insulation	
	Weather Resistant		Self-Reinforced	
			• Self-Relifiorced	
D 110 0 1:	Anti-Radiation			
RoHS Compliance	RoHS Compliant			
Processing Method	<ul> <li>Injection Molding</li> </ul>			
Physical Properties	Typical Value	Unit		Test Method
Density		g/cm <sup>3</sup>		ISO 1183
Molding Shrinkage	1.01	9/ 6111		NFD Standard
80*80*1mmt, Flow direction				TTD otaliaara
Inj. pressure 60MPa	0.06	%		
80*80*1mmt, Trans-direction				
Inj. pressure 60MPa	0.42	%		
, ,	0.04	04		ISO 62
Water absorption (23°C,24hrs,1mmt)	0.04	90		150 02
Hardness	Typical Value	Unit		Test Method
Rockwell Hardness-M(Scale)	55			ISO 2039-2
Mechanical Properties	Typical Value	Unit		Test Method
Tensile Strength	262	MPa		ASTM D638
Tensile Elongation	1	%		ASTM D638
Flexural stress	350	MPa		ISO 178
Flexural modulus	25000	MPa		ISO 178
Flexural strain	1.55	%		ISO 178
Impact Properties	Typical Value	Unit		Test Method
Charpy Notched Impact Strength	11.6	kJ/m <sup>2</sup>		ISO 179/1eA
23℃	11.0	KJ/TH		100 170/10/1
III. Declara	T. divid Vol. o	11.2		Tarak Maraka ak
UL Ratings Flammability	Typical Value V-0	Unit		Test Method
Flammability	V-0			UL 94
Electrical Propertie	Typical Value	Unit		Test Method
Relative Permittivity				IEC 60250
1 KHz	4.7			120 00200
1 MHz	4.3			
Volume Resisitivity	2.00E+16	Ohms·cm		IEC 60093
	2.002+10	OHII19.CHI		IEC 60093
Dielectric Strength	40	Ku/mm		IEC 00243-1
1mm	40	Kv/mm		

28 Kv/mm

Dissipation Factor		IEC 60250
1 KHz	0.01	
1 MHz	0.02	
Comparative Tracking Index (CTI)	175 V	IEC 60112
Arc Resistance	155 s	ASTM D495

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load	305	°C	ISO 75-2/A
1 8MPa Unannealed	295	C	150 75-2/A

## NFD ADVANCED COMPOSITES

Tepla® T3050GF

#### 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质可能会在被释放,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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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。

### **CONTACT:**

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