

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Tepla® T3050GB

# Material Description:

Tepla ® T3050GB is a Liquid Crystal Polymer (LCP) product filled with 50% glass bead. Characteristics include: Flame Rated, Heat Resistant.

Resistant.				
General				
Material Status	<ul> <li>Commercial: Active</li> </ul>			
	Asia Pacific		<ul> <li>North America</li> </ul>	
Availability	• Europe		<ul> <li>Latin America</li> </ul>	
	Middle East		Africa	
Filler/Reinforcemen	<ul> <li>Glass Bead, 50% Filler by W</li> </ul>	/eight		
	High Strength		<ul> <li>High Toughness</li> </ul>	
	<ul> <li>Low Anisotropy</li> </ul>		<ul> <li>Flame Retardant</li> </ul>	
	Corrosion Resistant		Creep Resistant	
Features	Self-Reinforced		Heat Resistant	
	Weather Resistant		<ul> <li>Anti-Radiation</li> </ul>	
	<ul> <li>Electrical Insulation</li> </ul>		<ul> <li>High Flow</li> </ul>	
	Chemical Resistant			
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>			
Processing Method	Injection Molding			
Physical Properties	Typical Value			Test Metho
Density	1.81	g/cm <sup>3</sup>		ISO 118
Molding Shrinkage				NFD Standar
80*80*1mmt, Flow direction	0.05	0/		
Inj. pressure 60MPa	0.25	90		
80*80*1mmt, Trans-direction	0.50	0/		
Inj. pressure 60MPa	0.58	96		
Water absorption (23℃,24hrs,1mmt)	0.01	%		ISO 6
Mechanical Properties	Typical Value	Unit		Test Metho
Tensile Strength	104	MPa		ASTM D63
Tensile Elongation	5	%		ASTM D63
Flexural stress	140	MPa		ISO 17
Flexural modulus	10200	MPa		ISO 17
Flexural strain	4	%		ISO 17
Hardness	Typical Value	Unit		Test Metho
Rockwell Hardness	80	- Jinic		ISO 2039-
Impact Droportios	Typical Value	Unit		Test Metho
Impact Properties Charpy Notched Impact Strength	Typical value	Onit		Test Metho
23°C	7	kJ/m <sup>2</sup>		ISO 179/1e
II Dotings	T. weiged Medical	I baid		Took Mathe
UL Ratings	Typical Value	Unit		Test Metho
Flammability	V-0			UL 9
Electrical Propertie	Typical Value	Unit		Test Metho
Relative Permittivity				IEC 6025
1 KHz	4.8			
1 MHz	4.4			
Volume Resisitivity	1E+16	Ohms·cm		IEC 6009
Dielectric Strength				IEC 60243-
1mm	44	Kv/mm		
2 4 62				6.1.1

3mm	28 Kv/mm	
Dissipation Factor		IEC 60250
1 KHz	0.02	
1 MHz	0.03	
Comparative Tracking Index (CTI)	200 V	IEC 60112
Arc Resistance	180 s	ASTM D495

Thermal Properties	Typical Value Unit	Test Method
Deflection Temperature Under Load	230 ℃	ISO 75-1.2
1.8MPa Unannealed	230 (	130 73-1,2

## NFD ADVANCED COMPOSITES

Tepla® T3050GB

#### 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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## COMPANY/公司:

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