

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Tepla® T6000 CF TF CL

## **Material Description:**

Tepla ® T6000 CF TF CL is a compound based on Polyethersulfone (PES) resin containing Carbon Fiber, PTFE. Added features include: Internally Lubricated, Electrically Conductive.

General		
Material Status	<ul> <li>Commercial: Active</li> </ul>	
Availability	Asia Pacific	<ul> <li>North America</li> </ul>
	• Europe	<ul> <li>Latin America</li> </ul>
	Middle East	<ul> <li>Africa</li> </ul>
-iller/Reinforcement	<ul> <li>Carbon Fiber</li> </ul>	
Additive	PTFE Lubricant	
	<ul> <li>Electrically Conductive</li> </ul>	<ul> <li>Lubricated</li> </ul>
- acture a	Heat Resistant	<ul> <li>Good Mechanical Properties</li> </ul>
Features	Flame Retardant	<ul> <li>Hydrolysis Resistant</li> </ul>
	Chemical Resistant	
RoHS Compliance	RoHS Compliant	
Processing Method	Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Density	1.54	g/cm <sup>3</sup>	ISO 1183
Mold Shrinkage Flow, 24 hrs	0.5	%	NFD Method

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	20200	MPa	ISO 527-2/1
Tensile Stress, break	146	MPa	ISO 527-2/5
Tensile Strain, break	1.6	%	ISO 527-2/5
Flexural Modulus, 2 mm/min	17400	MPa	ISO 178
Flexural Stress, yield, 2mm/min	218	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact 80*10*4, 23°C	7	kJ/m2	ISO 180/1A
Unnotched Izod Impact 80*10*4, 23°C	25.2	kJ/m2	ISO 180/1U

Flame Characteristics	Typical Value Unit	Test Method
Flame Rating (1.50 mm)	V-0	UL 94

Thermal Properties	Typical Value	Unit	Test Method
Heat Deflection Temperature,			
1.8MPa, Unannealed 80*10*4 mm, 64.0 mm Span	223	$^{\circ}\! \mathbb{C}$	ISO 75-2/Af
CLTE, 23°C to 60°C, Flow	7.00E-06	cm/cm/°C	ISO 11359-2
CLTE, 23℃ to 60℃, Xflow	3.60E-05	cm/cm/℃	ISO 11359-2
Surface Resistivity	1.0E+2to1.0E+3	Ohms	ASTM D257

Typical Value	Unit
0.05	%
354 to 370	$^{\circ}$ C
138 to 150	$^{\circ}$ C
120 to 150	${\mathbb C}$
4	hr
	0.05 354 to 370 138 to 150 120 to 150

Front Temperature	370 to 382	${\mathbb C}$
Middle Temperature	360 to 370	${\mathbb C}$
Rear Temperature	343 to 355	${\mathbb C}$
Back Pressure	0.344 to 0.689	MPa
Screw Speed	60 to 100	rpm

# NFD ADVANCED COMPOSITES

Tepla® T6000 CF TF CL

#### 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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## CONTACT:

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