

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Tepla® T2040CF

# **Material Description:**

Tepla® T2040CF is a Polyphenylene Sulfide (PPS) product filled with 40% carbon fiber. Characteristics include: Flame Rated, RoHS Compliant. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America. Applications of Tepla® T2040CF include automotive, business/office goods, conveyors, engineering/industrial parts and packaging.

General			
Material Status	<ul> <li>Commercial: Active</li> </ul>		
	Asia Pacific		North America
Availability	• Europe		Latin America
	Middle East		Africa
Filler/Reinforcement	<ul> <li>Carbon Fiber, 40% Filler by</li> </ul>	Weight	
Features	Good Rigidity		Electric Conduction
	<ul> <li>Flame Retardant</li> </ul>		<ul> <li>Good Dimensional Stability</li> </ul>
	<ul> <li>Low Moisture Absorption</li> </ul>		Wear Resistant
Uses	<ul> <li>Automotive Electronics</li> </ul>		<ul> <li>Business Equipment</li> </ul>
	• Bushings		<ul> <li>Conveyor Parts</li> </ul>
	<ul> <li>Packaging</li> </ul>		
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>		
Forms	<ul> <li>Pellets</li> </ul>		
Appearance	Natural Color		
Dhysical Properties	Typical Value	Unit	Tost Mathod
Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.48	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.05	%	ASTM D955
Water Absorption (24 hr)	0.02	%	ASTM D570
Hardness	Typical Value	Unit	Test Method
Rockwell Hardness (E-Scale)	75		ASTM D785
	T : 17/1	11.2	7
Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	31400	MPa	ASTM D638
Tensile Strength (Yield)	260	MPa	ASTM D638
Tensile Elongation (Yield) Flexural Modulus	30000	% MPa	ASTM D638 ASTM D790
Flexural Strength (Yield)	340	MPa	ASTM D790
Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact	75	J/m	ASTM D256
Unnotched Izod Impact	510	J/m	ASTM D4812
Plant and STO	T distMale	11.20	Total Marilland
Flammability	Typical Value	Unit	Test Method
Flame Rating	V-0		UL 94
Electrical Properties	Typical Value	Unit	Test Method
Surface Resistivity		ohms	ASTM D257
The second Processing	T 1111	11.20	<del>-</del>
Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load	222		ASTM D648
0.45 MPa, Unannealed	266		
1.8 MPa, Unannealed	263	°C	ACTA A DOGG
CLTE - Flow	1.30E-05	cm/cm/℃	ASTM D696

Injection	Typical Value	Unit
Drying Temperature	163	${\mathbb C}$
Drying Time	4	hr
Rear Temperature	288 to 304	${\mathbb C}$
Middle Temperature	316 to 343	${\mathbb C}$
Front Temperature	310 to 332	${\mathbb C}$
Nozzle Temperature	316 to 332	${\mathbb C}$
Processing (Melt) Temp	324 to 338	${\mathbb C}$
Mold Temperature	129 to 163	${\mathbb C}$

## NFD ADVANCED COMPOSITES

Tepla® T2040CF

#### 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:

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

Modeling Marker (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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