

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Tepla® T7120GF

# **Material Description:**

Mold Temperature

Tepla® T7120GF is a polyaryletherketone (PAEK) product filled with 20% glass fiber. Characteristics include: Heat 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		<ul> <li>Africa</li> </ul>	
Filler/Reinforcement	<ul> <li>Glass Fiber, 20% Filler by W</li> </ul>	/eight		
Features	Chemical Resistant		<ul> <li>Good Moldability</li> </ul>	
	<ul> <li>Good Thermal Stability</li> </ul>			
Appearance	Natural Color			
Forms	Pellets			
RoHS Compliance	Contact Manufacturer			
Processing Method	<ul> <li>Injection Molding</li> </ul>			
Physical Properties	Typical Value	Unit		Test Metho
Density/Specific Gravity	1.44	g/cm <sup>3</sup>		ASTM D79
Water Absorption (24 hr,23 °C)	0.1	%		ASTM D57
Molding Shrinkage - Flow	0.3 to 0.5			ASTM D97
Wilding Shirinage Flow	0.0 to 0.0	70		7.01111 200
Mechanical Properties	Typical Value	Unit		Test Metho
Tensile Modulus	9150	MPa		ASTM D63
Tensile Strength (Yield)	152	MPa		ASTM D63
Tensile Elongation (Break)	2.7	%		ASTM D63
Flexural Modulus	7200	MPa		ASTM D79
Flexural Strength (Yield)	233	MPa		ASTM D79
Impact Properties	Typical Value	Unit		Test Metho
Notched Izod Impact (3.18 mm)	82	J/m		ASTM D25
Unnotched Izod Impact (3.18 mm)	756	J/m		ASTM D481
Thermal Properties	Typical Value	Unit		Test Metho
Deflection Temperature Under Load	Typical value	Offic		ASTM D64
1.8 MPa, Unannealed	293	°C		ASTIVI D04
1.6 MPa, Offaffilealed	293	$^{\circ}\!\mathbb{C}$		
lectrical Properties	Typical Value	Unit		Test Metho
Volume Resistivity	1.00E+16	ohms∙cm		ASTM D25
Dielectric Strength	15	kV/mm		ASTM D14
Flammability	Typical Value	Unit		Test Metho
Flame Rating	V-0			UL 9
Processing Information	Typical Value	Unit		
Drying Temperature	149	°C		
Drying Time	3	hr		
Suggested Max Moisture	0.01	%		
Suggested Max Regrind	20	%		
Rear Temperature	343 to 377	°C		
Middle Temperature	354 to 388	°C		
Front Temperature	366 to 399	$^{\circ}$		

149 to 218 °C

Injection Pressure	68.9 to 124	MPa
Back Pressure	0.172 to 0.689	MPa
Screw Speed	60 to 90	rpm
Clamp Tonnage	6.9 to 11	kN/cm <sup>2</sup>

# NFD ADVANCED COMPOSITES

Tepla® T7120GF

#### 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。

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