

## Tepla® T8040LCF

### Material Description:

Tepla® T8040LCF is a compound based on Polyetherimide(PEI) containing 40% Long Carbon Fiber. Added feature of this grade is: Structural.

General	
Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Asia Pacific</li> <li>Europe</li> <li>Middle East</li> </ul>
	<ul style="list-style-type: none"> <li>North America</li> <li>Latin America</li> <li>Africa</li> </ul>
Filler/Reinforcement	<ul style="list-style-type: none"> <li>Long Carbon Fiber, 40% Filler by Weight</li> </ul>
Features	<ul style="list-style-type: none"> <li>Structural Parts</li> <li>Heat Resistant</li> <li>Fatigue Resistant</li> <li>Flame Retardant</li> <li>High Strength</li> </ul>
	<ul style="list-style-type: none"> <li>Good Mechanical Properties</li> <li>Low Temperature Resistant</li> <li>Creep Resistant</li> <li>Good Electrical Properties</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Structural Parts</li> <li>Automotive Applications</li> <li>Consumer Applications</li> <li>Industrial Applications</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>Contact Manufacturer</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>

Physical Properties	Typical Value	Unit	Test Method
Specific Gravity	1.6	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage			ASTM D955
Flow, 24 hrs	0.1 to 0.3	%	
Across Flow, 24 hrs	0.3 to 0.5	%	

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus, 5 mm/min	35000	MPa	ASTM D638
Tensile Strength, break, Type I 5.0 mm/min	280	MPa	ASTM D638
Tensile Elongation, break, Type I 5.0 mm/min	1.5	%	ASTM D638
Flexural Modulus, 1.3 mm/min 50.0 mm Span	36000	MPa	ASTM D790
Flexural Strength, break, 1.3 mm/min 50.0 mm Span	430	MPa	ASTM D790
Compressive Strength	410	MPa	NFD Method

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact, 23°C	195	J/m	ASTM D256
Unnotched Izod Impact, 23°C	840	J/m	ASTM D4812

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load 1.82MPa, Unannealed, 3.2mm	206	°C	ASTM D648
CLTE			ASTM D696
-30°C to 30°C, Flow	1.50E-05	cm/cm/°C	
-30°C to 30°C, Xflow	4.10E-05	cm/cm/°C	

Processing Information	Typical Value	Unit
Maximum Moisture Content	0.15	%
Melt Temperature	350 to 364	°C

Mold Temperature	149 to 164	°C
Drying Temperature	121	°C
Drying Time	4	hr
Front Temperature	350 to 364	°C
Middle Temperature	350 to 364	°C
Rear Temperature	345 to 360	°C
Back Pressure	0.29 to 0.43	MPa
Screw Speed	30 to 60	rpm

**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热熔温度或时间。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.

上列数据仅作参考用途，它们可能会受不同因素的影响，使用者有责任通过实验自行确定材料特性。上述资料根据现有测试得出，对物料特性是否适合某特殊用途及特性不能给予保证，数据也没有任何法律约束力。更多有关详细的产品监管信息，请联系客户服务。

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