

## Teppla® T2040CF 13TF 2SI

### Material Description:

Teppla® T2040CF 13TF 2SI is a Polyphenylene Sulfide (PPS) product filled with 40% carbon fiber and 13% PTFE, 2% Silicone. Characteristics include: Lubricated, Medium Heat Resistance, Wear Resistant.

### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • North America • Europe • Latin America • Middle East • Africa
Filler/Reinforcement	• Carbon Fiber, 40% Filler by Weight
Additive	• PTFE Lubricant: 13% • Silicone Lubricant: 2%
Features	• Lubricated • Flame Retardant • Good Dimensional Stability • Creep Resistant • Low Moisture Absorption • Wear Resistant • Good Rigidity • Chemical Resistant • Medium Heat Resistance • Antistatic
Appearance	• Black • Unspecified Color
Forms	• Pellets
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.54	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.08	%	ASTM D955
Water Absorption (24 hr, 23°C)	0.02	%	ASTM D570

Hardness	Typical Value	Unit	Test Method
Rockwell Hardness (R-Scale)	123		ASTM D785

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	28500	MPa	ASTM D638
Tensile Strength	143	MPa	ASTM D638
Tensile Elongation(Break)	0.5	%	ASTM D638
Flexural Modulus	25000	MPa	ASTM D790
Flexural Strength	230	MPa	ASTM D790
Compressive Strength	175	MPa	ASTM D695
Coefficient of Friction (vs. Metal - Dynamic)	0.19		ASTM D1894

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact(3.18mm)	56	J/m	ASTM D256
Unnotched Izod Impact(3.18mm)	220	J/m	ASTM D4812

Flammability	Typical Value	Unit	Test Method
Flame Rating	V-0		UL 94

Electrical Properties	Typical Value	Unit	Test Method
Volume Resistivity	30	ohms-cm	ASTM D257

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	260	°C	ASTM D648

1.8 MPa, Unannealed	260	°C	
CLTE - Flow	1.40E-05	cm/cm/°C	ASTM D696
Thermal Conductivity	0.48	W/m/K	ASTM C177

Processing Information	Typical Value	Unit	
Drying Temperature	149	°C	
Drying Time	6	hr	
Suggested Max Moisture	0.04	%	
Suggested Max Regrind	20	%	
Rear Temperature	302 to 343	°C	
Middle Temperature	302 to 343	°C	
Front Temperature	302 to 343	°C	
Mold Temperature	66 to 177	°C	
Injection Pressure	103 to 138	MPa	
Clamp Tonnage	6.9 to 11	kN/cm <sup>2</sup>	

#### Additional Information

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 1mil/in.

Wear Factor, K, ASTM D-3702: 85E-10in<sup>3</sup>/min/ft/lb/hr

Coefficient of Friction, Dynamic, ASTM D-3702: 0.19

## NFD ADVANCED COMPOSITES

Tepla® T2040CF 13TF 2SI

### 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处理温度或时间。请避免吸入或与皮肤、眼睛等接触。清扫和处理溢出的树脂, 以消除滑倒的危险。

### 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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