

## Tepla® T2030GF

### Material Description:

Tepla® T2030GF is a compound based on Polyphenylene Sulfide(PPS) - Branched resin containing 30% Glass Fiber.

### General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• North America	
	• Europe	• Latin America	
	• Middle East	• Africa	
Filler/Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Branched Polymer Structure	• Good Dimensional Stability	
	• Creep Resistant	• Low Water Absorption	
	• Chemical Resistant	• Good Rigidity	
	• Flame Retardant		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.58	g/cm <sup>3</sup>	ASTM D792,ISO 1183
Molding Shrinkage			
Across Flow:24hr	0.40 to 0.70	%	ASTM D955, ISO 294-4
Flow:24hr	0.10 to 0.30	%	ASTM D955
Flow:24hr	0.13 to 0.30	%	ISO 294-4
Water Absorption			
Equilibrium,23°C , 50% RH	0.06	%	ISO 62

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus			
50 mm/min	13000	MPa	ASTM D638
	12800	MPa	ISO 527-2/1
Tensile Strength			
Break	133	MPa	ASTM D638
Break	132	MPa	ISO 527-2
Tensile Elongation			
Break	1.5	%	ASTM D638
Break	1.5	%	ISO 527-2
Flexural Modulus			
	11800	MPa	ASTM D790
	12200	MPa	ISO 178
Flexural Strength			
	220	MPa	ASTM D790
	225	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact			
23°C	70	J/m	ASTM D256
23°C, 80*10*4	10	KJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact			
23°C	410	J/m	ASTM D4812
23°C, 80*10*4	31	KJ/m <sup>2</sup>	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	8.6	J	ASTM D3763
	2.6	J	ISO 6603-2

Flammability	Typical Value	Unit	Test Method
Flame Rating (0.45 mm )	V-0		UL 94

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed, 3.2mm	268	°C	ASTM D648
1.8 MPa, Unannealed, 64mm Span, 80*10*4 mm	266	°C	ISO 75-2/ Af
CLTE			
Flow: -40 to 40°C	2.30E-05	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	2.40E-05	cm/cm/°C	ISO 11359-2
Transverse: -40 to 40°C	4.50E-05	cm/cm/°C	ASTM E831
Transverse: -40 to 40°C	4.60E-05	cm/cm/°C	ISO 11359-2

Processing Information	Typical Value	Unit
Processing (Melt) Temp	316 to 321	°C
Mold Temperature	138 to 166	°C
Drying Temperature	121 to 149	°C
Drying Time	4	hr
Rear Temperature	304 to 316	°C
Middle Temperature	321 to 332	°C
Front Temperature	332 to 343	°C
Back Pressure	0.172 to 0.344	MPa
Screw Speed	30 to 60	rpm

NFD ADVANCED COMPOSITES Tepla® T2030GF

#### 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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