

Matreial Data Sheet

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

Tepla® T8010CF 30GF EC

Material Description:

Tepla ® T8010CF 30GF is a compound based on Polyetherimide (PEI) resin containing 10% Carbon Fiber, 30% Glass Fiber. Added features of this material include: Electrically Conductive.

General				
Material Status	 Commercial: Active 			
Availability	Asia Pacific		 North America 	
	• Europe		 Latin America 	
	Middle East		 Africa 	
Filler/Reinforcement	 Carbon Fiber, 10% Filler by 	Weight		
	• Glass Fiber, 30% Filler by W	eight //		
	Electrically Conductive		Fatigue Resistant	
-	Steam Resistant		Creep Resistant	
	Chemical Resistant		Flame Retardant	
	Heat Resistant		High Stiffness	
Features	Wear Resistant			
	• Radiation (Gamma) Resista	nt	Hydrolysis Stable	
	 Good Dimensional Stability 		Mold Release	
	High Flow			
Applications	Hospital Goods		Aircraft Applications	
	Industrial Applications		Medical Devices	
	Connectors		Medical/Healthcare App	lications
	Dental Applications		Electrical/Electronic App	
RoHS Compliance	RoHS Compliant		- Electrical/Electronic App	lications
Processing Method	Injection Molding			
Processing Method	· Injection Molaling			
Physical Properties	Typical Value	Unit		Test Method
Density	1.57	g/cm ³		ASTM D792
Mold Shrinkage	1.01	g/ cm		ASTM D955
Flow, 24 hrs	0.1 to 0.2	06		ASTIVI DSSS
Across Flow, 24 hrs	0.3 to 0.4			
ACIOSS 110W, 24 1115	0.5 to 0.4	70		
Mechanical Properties	Typical Value	Unit		Test Method
Tensile Modulus, 50 mm/min	18500	MPa		ASTM D638
Tensile Stress, break	190	MPa		ASTM D638
Tensile Strain, break	1.4	%		ASTM D638
Flexural Modulus	16300	MPa		ASTM D790
Flexural Stress	272	MPa		ASTM D790
riexurai Stress	212	IVIF a		ASTIVI D190
Impact Properties	Typical Value	Unit		Test Method
Notched Izod Impact, 23°C		J/m		ASTM D256
Unnotched Izod Impact, 23 ℃		J/m		ASTM D230
Unnotched Izod Impact, 23 C	402	J/111		A31101 D4012
Electrical Properties	Typical Value	Unit		Test Method
Volume Resistivity	1E10 to 1E11		111111	ASTM D257
volume resistivity	TLIO TO TLIT	Omnifoli		ASTIVI DEST
Thermal Properties	Typical Value	Unit		Test Method
Deflection Temperature Under Load			111111	
1.82MPa, Unannealed, 3.2mm	212	$^{\circ}\!\mathbb{C}$		ASTM D648
CLTE				ASTM E831
	2.52E-05	om/om/°C		₩211A1 E02T
-40°C to 40°C, Flow	2.34E-05	cm/cm/℃ cm/cm/℃		
-40°C to 40°C, Xflow	Z.34E-U5	cm/cm/ C		

Processing Information Typical	Value	Unit
Maximum Moisture Content	0.05	%
Melt Temperature 360 t	to 365	$^{\circ}\!$
Mold Temperature 120 t	to 150	${\mathbb C}$
Drying Temperature 120 t	to 150	$^{\circ}$
Drying Time	4	hr
Front Temperature 365 t	to 375	$^{\circ}$
Middle Temperature 355 t	to 365	$^{\circ}$
Rear Temperature 345 t	to 355	${\mathbb C}$
Back Pressure 0.3	to 0.7	MPa
Screw Speed 60 t	to 100	rpm

NFD ADVANCED COMPOSITES

Tepla® T8010CF 30GF EC

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:

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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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