New Formula Designer

Matreial Data Sheet

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

Tepla® T7013GF

Material Description:

Tepla® T7013GF is a low flow, 13% glass fiber reinforced polyetheretherketone (PEEK). The glass fiber content is optimized to provide a balance of strength and stiffness with toughness-related properties. The low fiberglass loading gives the resin improved surface aesthetics and reduced anisotropy over comparable 30% glass reinforced formulations.It has distinct fatigue resistance, purity, and chemical resistance to organics, acids, and bases.
These properties make it well-suited for applications in oil and gas recovery, semiconductor fabrication, automotive, aerospace, healthcare, chemical processing, and other industrial uses.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
	• Europe	• Latin America
	• Middle East	• Africa
Filler/Reinforcement	• Glass Fiber, 13% Filler by Weight	
Features	• High Strength	• High Stiffness
	• Chemical Resistant	• Flame Retardant
	• High Heat Resistance	• Fatigue Resistant
	• Good Dimensional Stability	• Hydrolysis Resistant
	• Electrical Insulation	• Self-Lubricating
	• Wear Resistant	
Uses	• Industrial Applications	• Oil/Gas Applications
	• Medical/Healthcare Applications	
Appearance	• Beige	• Opaque
Forms	• Pellets	• Powder
RoHS Compliance	• RoHS Compliant	
Processing Method	• Machining	• Injection Molding
	• Profile Extrusion	

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.38	g/cm^3	ASTM D792

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	6100	MPa	ASTM D638
Tensile Strength	132	MPa	ASTM D638
Tensile Strain (Yield)	4	%	ASTM D638
Tensile Elongation (Break)	6	%	ASTM D638
Flexural Modulus	5840	MPa	ASTM D790
Flexural Strength	206	MPa	ASTM D790

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact (23℃)	92	J/m	ASTM D256
Unnotched Izod Impact (23℃)	850	J/m	ASTM D4812

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load 1.8MPa，Unannealed，3.2mm	213	℃	ASTM D648

Processing Information	Typical Value	Unit
Injection Rate	Fast	
Screw Compresion Ratio	2.5:1.0 to 3.5:1.0	
Mold Temperature	176 to 205	℃
Drying Temperature	150	℃

Drying Time	4	hr
Front Temperature	375	℃
Middle Temperature	370	℃
Rear Temperature	365	℃
Nozzle Temperature	380	℃

Fill Analysis	Typical Value	Unit	Test Method
Melt Viscosity (400℃, 1000 sec^-1)	530	Pa·s	ASTM D3835

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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