Hepla® H7300 CF TF

Material Description:

Hepla® H7300 CF TF is a Polyamide 46 (Nylon 46) product filled with carbon fiber and PTFE.Characteristics include:Very strong and stiff parts;low coefficient of thermal expansion.Improved friction and wear behaviour. Optimised for dry running operations.Electrically conductive,suitable for continuous discharging of statically-generated electricity.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
	• Europe	• Latin America
	• Middle East	• Africa
Filler/Reinforcement	• Carbon Fiber	
Additive	• PTFE Lubricant	
Features	• Electrically Conductive	• High Stiffness
	• High Strength	• Low CLTE
	• Lubricated	• Wear Resistant
RoHS Compliance	• RoHs Compliant	
Forms	• Pellets	
Appearance	• Black	
Processing Method	• Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.42	g/cm^3	ISO 1183
Water Absorption (24 hr,23℃)	< 1.0	%	ISO 62
Molding Shrinkage	0.1 to 0.2	%	DIN 16742

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	24680	MPa	ISO 527-2/1
Tensile Stress	243	MPa	ISO 527-2/50
Tensile Strain (Yield)	1.6	%	ISO 527-2/50
Flexural Modulus [1]	20500	MPa	ISO 178
Flexural Stress [2]	348	MPa	ISO 178
Flexural Strain - at max. force [2]	2	%	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Charpy Notched Impact Strength [3]	9.2	KJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength [3]	56	KJ/m2	ISO 179/1eU

Thermal Properties	Typical Value	Unit	Test Method
Continuous Use Temperature [4]	150	℃	IEC 60216
Vicat Softening Temperature	290	℃	ISO 306/A
CLTE - Flow [5] (4.00 mm)	2.20E-05	cm/cm/℃	ISO 11359-2
Service Temperature - during lifetime max. 200 hr	160	℃	

Electrical Properties	Typical Value	Unit	Test Method
Surface Resistivity (4.00 mm)	< 1.0E +4	ohms	IEC 60093
Insulation Resistance [6]	< 1.0E +5	ohms	IEC 60167

Processing Information	Typical Value	Unit
Drying Temperature Desiccant Dryer	80	℃

Vacuum Dryer	80	℃
Drying Time		
Desiccant Dryer	2.0 to 8.0	hr
Vacuum Dryer	2.0 to 12.0	hr
Suggested Max Moisture	0.1	%
Rear Temperature	285 to 315	℃
Middle Temperature	305 to 315	℃
Front Temperature	305 to 315	℃
Nozzle Temperature	280 to 330	℃
Processing (Melt) Temp	310	℃
Mold Temperature	90 to 130	℃

NoTes

[1] 2.0 mm/min
[2] 10 mm/min
[3] 80x10x4mm
[4] 20,000 hr
[5] 10x8x4 mm
[6] Strip Electrode R25

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.
上列数据只作参考用途，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

COMPANY/公司：

Welcome to NFD, where the concept of "New Formula Designer" is upheld and scientific innovation and production are intertwined. Whether you are a designer, engineer or procurement expert, we can help you expand your business and get new inspiration. We adhere to the core values of credibility and integrity, cooperation, efficiency, and innovation, and always put our customers first. Compared with our competitors, we focus on providing more advanced technical formulation, better quality products, more efficient solutions and more thoughtful after-sales services. We understand the markets, the products, and you even more.
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。

CONTACT:
CHINA/JIANG SU
江苏新孚达复合材料有限公司
NFD Composite Material (Jiangsu) Co., Ltd
Email:yanghui@nfdpla.com
Internet:www.nfdpla.com

New Formula Designer