

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

Test Method

# Hepla® H7030CF H EC

## **Material Description:**

Hardness

Hepla ® H7030CF H EC is a Polyamide 12 (Nylon 12) material filled with 30% carbon fiber and Antistatic Agent, Heat Stabilizer. Characteristics include: Antistatic, Heat Stabilized. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for injection molding.

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General				
Material Status	<ul> <li>Commercial: Active</li> </ul>			
Availability	Asia Pacific	<ul> <li>North America</li> </ul>		
	• Europe	<ul> <li>Latin America</li> </ul>		
	Middle East	<ul> <li>Africa</li> </ul>		
Filler/Reinforcement	<ul> <li>Carbon Fiber, 30% Filler by Weight</li> </ul>			
Additive	Antistatic Agent	<ul> <li>Heat Stabilizer</li> </ul>		
	Antistatic	<ul> <li>Heat Stabilizer</li> </ul>		
Foatures	UV Resistant	<ul> <li>Heat Stabilized</li> </ul>		
Features	<ul> <li>Low Water Absorption</li> </ul>	<ul> <li>Chemical Resistant</li> </ul>		
	Wear Resistant	<ul> <li>Good Dimensional Stability</li> </ul>		
	<ul> <li>Medical Devices</li> </ul>			
Uses	Electrical/Electronic Applications	<ul> <li>Sporting Goods</li> </ul>		
USES	<ul> <li>Consumer Applications</li> </ul>	<ul> <li>Industrial Applications</li> </ul>		
	<ul> <li>Power/Other Tools</li> </ul>	<ul> <li>Engineering Parts</li> </ul>		
	<ul> <li>Isothermal Stress vs. Strain (ISO 1140)</li> </ul>	3-1)		
Multi-Point Data	• Tensile Modulus vs. Temperature (ISC	Tensile Modulus vs. Temperature (ISO 11403-1)		
	Shear Modulus vs. Temperature (ISO 11403-1)			
Appearance	Black			
Forms	Granules			
RoHS Compliance	RoHS Compliant			
Processing Method	Injection Molding			

Physical Properties	Typical Value	Unit	Test Method
Density	1.15	g/cm <sup>3</sup>	ISO 1183
Water Absorption	0.6	0%	ISO 62
(Equilibrium, 23℃, 50% RH)	0.0	70	130 02
Water Absorption	1.1	0/a	ISO 62
_(Saturation, 23℃, 50% RH)	1.1	70	130 02
Mold Shrinkage			ISO 294-4
Flow	0.1	%	
Across Flow	0.3	%	

Ball Indentation Hardness	130	ISO 2039-1
Mechanical Properties	Typical Value Unit	Test Method
Tensile Modulus	14876 MPa	ISO 527-2/1

Typical Value Unit

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Tensile Modulus	14876	MPa	ISO 527-2/1
Tensile Stress, break	147	MPa	ISO 527-2/1
Tensile Strain, break	3.6	%	ISO 527-2/1
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Impact Properties	Typical Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30℃	8.1	kJ/m <sup>2</sup>	
23℃	13.2	kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30℃		kJ/m <sup>2</sup>	
23℃	60.5	kJ/m <sup>2</sup>	

Flammability	Typical Value Unit	Test Method
Flammability Classification (0.8 mm)	НВ	IEC 60695-11-10, -20

<b>Electrical Properties</b>	Typical Value	Unit	Test Method
Volume Resistivity	1.00E+04	Ohm•cm	IEC 60093
Surface Resistivity	80	Ohms	IEC 60093

Thermal Properties	Typical Value	Unit	Test Method
Heat Deflection Temperature Under Load			
/Cf, 8 MPa Flatw 80*10*4 sp=64mm Unannealed	125	$^{\circ}\! \mathbb{C}$	ISO 75/Cf
/Af, 1.8 MPa Flatw 80*10*4 sp=64mm Unannealed	165	$^{\circ}$ C	ISO 75/Af
Continuous Use Temperature	90 to 120	°C	ISO 2578
Long Term	30 (0 120	C	130 2370
Continuous Use Temperature Short Term	150	$^{\circ}$ C	NFD Method
Melting Temperature, 10℃/min	178	$^{\circ}\!$	ISO 11357-3
CLTE			ISO 11359-2
Flow	1.00E-05	1/℃	
Xflow	1.30E-04	1/℃	

### NFD ADVANCED COMPOSITES

Hepla® H7030CF H 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。

## 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

