**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Hepla® H7000 EC

## Material Description:

Hepla ® H7000 EC is a Polyamide 12 (Nylon 12) material. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for injection molding. Hepla ® H7000 is a Polyamide 12 (Nylon 12) product filled with Antistatic Agent. Characteristics include: Electrically Conductive.

General		
Material Status	Commercial: Active	
Availability	Asia Pacific	<ul> <li>North America</li> </ul>
	Europe	<ul> <li>Latin America</li> </ul>
	Middle East	<ul> <li>Africa</li> </ul>
Additive	<ul> <li>Antistatic Agent</li> </ul>	
	• Antistatic	<ul> <li>Medium Heat Resistance</li> </ul>
	Electrically Conductive	<ul> <li>Medium Viscosity</li> </ul>
Features	Shock Resistant	<ul> <li>Chemical Resistant</li> </ul>
	<ul> <li>Low Water Absorption</li> </ul>	<ul> <li>Good Dimensional Stability</li> </ul>
	Wear Resistant	
	<ul> <li>Connectors</li> </ul>	<ul> <li>Automotive Applications</li> </ul>
Llaga	Electrical/Electronic Applications	<ul> <li>Industrial Applications</li> </ul>
Uses	<ul> <li>Consumer Applications</li> </ul>	<ul> <li>Engineering Parts</li> </ul>
	Power/Other Tools	
	• Isothermal Stress vs. Strain (ISO 1140	3-1)
Multi-Point Data	• Shear Modulus vs. Temperature (ISO	11403-1)
iviuiti-POIIIL Data	• Viscosity vs. Shear Rate (ISO 11403-2	2)
	• Secant Modulus vs. Strain (ISO 11403	3-1)
Forms	Granules	
RoHS Compliance	RoHS Compliant	
Processing Method	Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Density	1.16	g/cm <sup>3</sup>	ISO 1183
Water Absorption	0.6	%	ISO 62
_ (Equilibrium, 23℃, 50% RH)	0.0	70	130 02
Water Absorption	1.1	06	ISO 62
_ (Saturation, 23℃, 50% RH)	1.1	70	130 02
Mold Shrinkage			ISO 294-4
Flow	1.2	%	
Across Flow	1.4	%	

Hardness	Typical Value Unit	Test Method
Shore Hardness (Shore D, 15 sec)	72	ISO 868

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	2126	MPa	ISO 527-2/1
Tensile Stress, yield	54.5	MPa	ISO 527-2/1
Tensile Stress, break	49.5	MPa	ISO 527-2/1
Tensile Strain, yield	5.1	%	ISO 527-2/1
Nominal Tensile Strain at Break	25.2	%	ISO 527-2/1

Impact Properties	Typical Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30℃	$3.2 \text{ kJ/m}^2$	
23℃	$3.2 \text{ kJ/m}^2$	

Charpy Unnotched Impact Strength
-30°C
51 kJ/m²
No Break

<b>Electrical Properties</b>	Typical Value	Unit	Test Method
Volume Resistivity	1.00E+02	Ohms•cm	IEC 60093
Surface Resistivity	1.00E+02	Ohms	IEC 60093

Thermal Properties	Typical Value	Unit	Test Method
Heat Deflection Temperature Under Load			
/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm Unannealed	135	$^{\circ}$ C	ISO 75/Bf
/Af, 1.8 MPa Flatw 80*10*4 sp=64mm Unannealed	65	$^{\circ}$ C	ISO 75/Af
Continuous Use Temperature	90 to 110	°C	ISO 2578
Long Term	90 to 110	C	130 2376
Continuous Use Temperature	150	°C	NFD Method
Short Term	130	C	INI D Method
Melting Temperature, 10°C/min	178	$^{\circ}\!\mathbb{C}$	ISO 11357-3
CLTE			ISO 11359-2
Flow	1.20E-04	1/℃	
Xflow	1.30E-04	1/℃	

## NFD ADVANCED COMPOSITES

Hepla® H7000 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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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:**

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