

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Hepla® H7110GF

## Material Description:

Hepla® H7110GF is a Polyamide 6 (Nylon 6) product filled with 10% glass fiber. Application: impacted mouldings and mouldings with high strength applied in automotive, electrical, engineering and consumer-goods industry, eg.: grips for electro tools, hobby tools, gears, cases of the electrotools, cooling skrews of blowersindustry.

Material Status	<ul> <li>Commercial: Active</li> </ul>	
	Asia Pacific	North America
Availability	Europe	<ul> <li>Latin America</li> </ul>
•	Middle East	Africa
Filler/Reinforcement	<ul> <li>Glass Fiber, 10% Filler by Weight</li> </ul>	
	Chemically Coupled	<ul> <li>High Strength</li> </ul>
Features	Wear Resistant	<ul> <li>Impact Resistant</li> </ul>
	Self-Lubricating	
	<ul> <li>Automotive Applications</li> </ul>	<ul> <li>Engineering Parts</li> </ul>
Uses	Consumer Applications	<ul> <li>Flexible Grips</li> </ul>
	<ul> <li>Electrical/Electronic Applications</li> </ul>	• Gears
	Power/Other Tools	
Appearance	<ul> <li>Colors Available</li> </ul>	<ul> <li>Natural Color</li> </ul>
Processing Method	Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Density	1.17	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)	8	g/10 min	ISO 1133
230℃/2.16 kg		9, 10 11111	
Molding Shrinkage			STM 64 0808
Across Flow	1.7	%	
Flow	0.74	%	
Water Content	0.15	%	ISO 960

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	4900	MPa	ISO 527-2
Tensile Stress (Yield)	85	MPa	ISO 527-2
Tensile Strain (Yield)	4	%	ISO 527-2
Flexural Modulus	3900	MPa	ISO 178
Flexural Stress	145	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-20℃	2	kJ/m²	
23℃	2.7	kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
-20℃	17	kJ/m²	
23℃	25	kJ/m²	

Flammability	Typical Value Unit	Test Method
Flame Rating	НВ	UL 94
Glow Wire Ignition Temperature	650 ℃	IEC 60695-2-13

Thermal Properties	Typical Value	Unit	Test Method
Heat Deflection Temperature 0.45 MPa. Unannealed	200	${\mathbb C}$	ISO 75-2/B

Vicat Softening Temperature	195 ℃	ISO 306/B
Melting Temperature (DSC)	220 ℃	ISO 3146

Injection	Typical Value	Unit
Drying Temperature	80	$^{\circ}\mathrm{C}$
Drying Time	4	hr
Processing (Melt) Temp	250 to 270	°C
Mold Temperature	70 to 80	°C
Injection Pressure	70.0 to 120	MPa

## NFD ADVANCED COMPOSITES

Hepla® H7110GF

#### 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。

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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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## 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

