

## Hepla® H9000T CL

### Material Description:

Hepla® H9000T CL is an unreinforced, impact modified polyphthalamide (PPA) resin that exhibits exceptional impact strength at temperatures ranging from room temperature to as low as -40°F (-40°C), which suggests possible applications in ski boots and hockey skates. In addition, its chemical and wear resistance, combined with good mechanical properties, make Hepla® H9000 T CL resin a prime candidate for applications such as anti-friction and wear resistant components, chemical, oil field, automotive and safety equipment.

### General

Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
	• Europe	• Latin America
	• Middle East	• Africa
Additive	• Mold Release	• Lubricant
	• Impact Modifier	
Features	• Chemical Resistant	• Ductile
	• Hot Water Moldability	• Impact Modified
	• Low Temperature	• Impact Resistance
	• Low Warpage	• Lubricated
	• Wear Resistant	
Appearance	• Natural Color	
RoHS Compliance	• RoHS Compliant	
Forms	• Pellets	
Processing Method	• Injection Molding	
	• Water-Heated Mold Injection Molding	
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	
	• Secant Modulus vs. Strain (ISO 11403-1)	

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.11	g/cm <sup>3</sup>	ISO 1183/A
Molding Shrinkage			ASTM D955
Flow	1.7 to 2.2	%	
Across Flow	1.9 to 2.1	%	
Water Absorption (24 hr)	0.75	%	ASTM D570

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	1900	MPa	ASTM D638
Tensile Strength(Break)	62	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	6	%	
Break	30	%	
Flexural Modulus	2210	MPa	ASTM D790
Flexural Strength	97	MPa	ASTM D790
Poisson's Ratio	0.35		ASTM E132

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	750	J/m	
23°C	1100	J/m	

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Annealed, 3.18mm	120	°C	
Melting Temperature	310	°C	ISO 11357-3

Processing Information	Typical Value	Unit
Processing (Melt) Temp	321 to 343	°C
Mold Temperature	> 135	°C
Drying Temperature	110	°C
Drying Time	4	hr
Suggested Max Moisture	0.045	%
Hopper Temperature	79	°C
Rear Temperature	304 to 318	°C
Front Temperature	316 to 329	°C

## NFD ADVANCED COMPOSITES

Hepla® H9000T CL

### 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, 以消除滑倒的危险。

### 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.

上列数据仅作参考用途, 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:

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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

