

**Matreial Data Sheet** 

技术数据表

NFD Composite Material (Jiangsu) Co., Ltd

# Hepla® H5100 CL DEL

## Material Description:

 $Hepla \circledast \ H5100 \ CL \ DEL \ is \ a \ Acetal \ (POM) \ Homopolymer \ product \ filled \ with \ Lubricant. Characteristics \ include: chemical \ lubricant, \\ designed \ for \ low \ wear \ and \ friction \ against \ metals.$ 

Material Status	<ul> <li>Commercial: Active</li> </ul>	
	Asia Pacific	North America
Availability	• Europe	<ul> <li>Latin America</li> </ul>
	Middle East	Africa
Additive	<ul> <li>Lubricant</li> </ul>	
Гоофия	Wear Resistant	<ul> <li>Lubricated</li> </ul>
Features	<ul> <li>Homopolymer</li> </ul>	Fatigue Resistant
Processing Method	Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Melt Mass-Flow Rate 190°C/2.16kg	15	g/10 min	ISO 1133
Moisture Content	< 0.2	%	

Mechanical Properties	Typical Value	Unit	Test Method
Yield Stress	65	MPa	ISO 527
Yield Strain	13.5	%	ISO 527
Strain at Break	24	%	ISO 527
50mm/min	24	70	130 321
Nominal Strain at Break	18.7	%	ISO 527
Tensile Modulus	3259	MPa	ISO 527
Flexural Modulus	2948	MPa	ISO 178

Impact Properties	Typical Value Unit	Test Method
Notched Charpy Impact Strength		ISO 179/1eA
-30℃	8.2 kJ/m <sup>2</sup>	
23℃	9.5 kJ/m <sup>2</sup>	

Flammability	Typical Value Unit	Test Method
Flammability Classification		IEC 60695-11-10
0.75mm	НВ	
1.5mm	HB	
3mm	НВ	

Electrical Properties	Typical Value Unit	Test Method
CTI	600 V	IEC 60112

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa	160	${\mathbb C}$	
1.8 MPa	90	${\mathbb C}$	
RTI, Electrical			UL 746B
0.75mm	50	${\mathbb C}$	
1.5mm	100	${\mathbb C}$	
3mm	100	${\mathbb C}$	
RTI, Impact			UL 746B
0.75mm	50	${\mathbb C}$	
1.5mm	80	${\mathbb C}$	
3mm	80	${\mathbb C}$	

 RTI, Strength
 UL 746B

 0.75 mm 50 °C

 1.5 mm 85 °C

 3mm
 85 °C

 Melting Temperature (10 °C/min)
 178 °C

 ISO 11357-1/-3

Processing Information Typical Value	Unit
Melt Temperature 210-220	$^{\circ}\!\mathbb{C}$
Melt Temperature Optimum 215	$^{\circ}\!$
Mold Temperature 80-100	$^{\circ}\!\mathbb{C}$
Mold Temperature Optimum 90	$^{\circ}\!\mathbb{C}$
Drying Time, Dehumidified Dryer 2-4	hr
Drying Temperature 80	$^{\circ}\!\mathbb{C}$
Hold Pressure Range 80-100	MPa

#### Notes:

ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, Test temperatures are 23°C unless otherwise stated.

#### NFD ADVANCED COMPOSITES

Hepla® H5100 CL DEL

#### 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。

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