Matreial Data Sheet

技术数据表 NFD Composite Material (Jiangsu) Co., Ltd

Hepla® H9025GF T H

Material Description:

Hepla ® H9025GF T H polyphthalamide (PPA) is a toughened, heat stabilized 25% glass reinforced resin, designed as a cost effective solution for applications requiring stiffness, good dimensional stability, chemical resistance and ductility. Industrial Applications: bearing retainers/cages, housings, chemical processing equipment components, motor frames, sporting equipment, lawn and garden equipment and components that require press-fit or snap-fit assembly.

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General		
Material Status	Commercial: Active	
	Asia Pacific	North America
Availability	• Europe	Latin America
	Middle East	Africa
Filler/Reinforcement	 Glass Fiber, 25% Filler by Weight 	
Additive	Heat Stabilizer	 Impact Modifier
	 Chemical Resistant 	 Good Dimensional Stability
Features	Heat Stabilized	 High Heat Resistance
	 Impact Modified 	
	 Appliance Components 	 Appliances
	 Automotive Applications 	 Automotive Electronics
	Automotive Under the Hood	 Bearings
Uses	 Connectors 	 Fuel Lines
Uses	General Purpose	 Housings
	 Industrial Applications 	 Industrial Parts
	 Lawn and Garden Equipment 	 Machine/Mechanical Parts
	Metal Replacement	
Appearance	Black	Natural Color
RoHS Compliance	RoHS Compliant	
Forms	• Pellets	
Processing Method	Injection Molding	
Physical Properties	Typical Value Unit	Test Method
Density/Specific Gravity	1.35 g/cm ³	ASTM D792
Molding Shrinkage		ASTM D955
Flow	0.4 %	
Across Flow	0.6 %	
Water Absorption (24 hr)	0.2 %	ASTM D570
Mechanical Properties	Typical Value Unit	Test Method
Tensile Modulus		
	8480 MPa	ASTM D638
	8890 MPa	ISO 527-2
Tensile Strength		
Break	174 MPa	ASTM D638
Break	190 MPa	ISO 527-2
Tensile Elongation		
Break	3.2 %	ASTM D638
Break	2.5 %	ISO 527-2
Flexural Modulus		
	7580 MPa	ASTM D790
	7790 MPa	ISO 178
Flexural Stress		
	240 MPa	ISO 178
Yield	255 MPa	ASTM D790

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact			
	120	J/m	ASTM D256
	8.8	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength	1100	J/m	ASTM D256
Charpy Notched Impact Strength	8.8	kJ/m²	ISO 179/1eA
Instrumented Dart Impact			ASTM D3763
Energy at Maxumum Load ¹	1.9	J	
Energy at Maxumum Load ¹ Energy at Maxumum Load ²	2.03	J	
Total Energy	13.8	J	

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Annealed	279	$^{\circ}$ C	ASTM D648
1.8 MPa, Unannealed	235	$^{\circ}\! \mathbb{C}$	ISO 75-2/A
1.8 MPa, Annealed	280	$^{\circ}$ C	ASTM D648
Melting Temperature	311	$^{\circ}$ C	ASTM D3418

Processing Information	Typical Value	Unit
Processing (Melt) Temp	321 to 343	${\mathbb C}$
Drying Temperature	121	. °C
Drying Time	4	hr
Suggested Max Moisture	0.1	. %
Hopper Temperature	79	$^{\circ}$
Rear Temperature	304 to 318	${\mathbb C}$
Front Temperature	316 to 329	${\mathbb C}$
Mold Temperature	135	℃

NFD ADVANCED COMPOSITES

Hepla® H9025GF T H

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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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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