

Hepla® H7040GF

Material Description:

Hepla® H7040GF is a compound based on Nylon 12 resin containing 40% Glass Fiber. Characteristics include: High Impact Resistance, High Toughness.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific
	• Europe
	• Middle East
Filler/Reinforcement	• Glass Fiber, 40% by Weight.
	• High Impact Resistance
	• Fatigue Resistant
Features	• Chemical Resistant
	• Heat Resistant
	• Wear Resistant
	• Good Dimensional Stability
	• Hospital Goods
	• Industrial Applications
Applications	• Medical/Healthcare Applications
	• Aircraft Applications
	• Medical Devices
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical Properties	Typical Value	Unit	Test Method
Density	1.37	g/cm ³	ASTM D792
Density	1.37	g/cm ³	ISO 1183
Moisture Absorption (24hr, 50% RH)	0.1	%	ASTM D570
Mold Shrinkage			ASTM D955
Flow, 24 hrs	0.2	%	
Across Flow, 24 hrs	0.7	%	
Mold Shrinkage			ISO 294
Flow, 24 hrs	0.18	%	
Across Flow, 24 hrs	0.73	%	

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus, 1 mm/min	8580	MPa	ISO 527
Tensile Modulus, 50 mm/min	8092	MPa	ASTM D638
Tensile Stress, break	137	MPa	ASTM D638
Tensile Strain, break	6.5	%	ASTM D638
Tensile Stress, break	150.3	MPa	ISO 527
Tensile Strain, break	7	%	ISO 527
Flexural Modulus	9189	MPa	ISO 178
Flexural Modulus	7765	MPa	ASTM D790
Flexural Stress	98	MPa	ASTM D790
Flexural Stress	215	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact, 23°C	262	J/m	ASTM D256
Unnotched Izod Impact, 23°C	1409	J/m	ASTM D4812
Notched Izod Impact 80*10*4, 23°C	18.2	kJ/m ²	ISO 180/1A
Unnotched Izod Impact 80*10*4, 23°C	76.7	kJ/m ²	ISO 180/1U

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load			
1.82MPa, Unannealed, 3.2mm	170	°C	ASTM D648
0.45MPa, Unannealed, 3.2mm	176	°C	ASTM D648
/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	166	°C	ISO 75/Af

Processing Information	Typical Value	Unit
Melt Temperature	225 to 240	°C
Mold Temperature	70 to 80	°C
Drying Temperature	80	°C
Drying Time	4	hr
Front Temperature	225 to 240	°C
Middle Temperature	220 to 230	°C
Rear Temperature	215 to 225	°C
Back Pressure	0.2 to 0.3	MPa
Screw Speed	30 to 60	rpm
Maximum Moisture Content	0.12 to 0.2	%

NFD ADVANCED COMPOSITES

Heppla® H7040GF

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.

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

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