

Heppla® H8050GF FR

Material Description:

Heppla® H8050GF FR is a 50% glass-fiber reinforced, flame retardant polyarylamide PARA which exhibits high strength and stiffness, outstanding surface gloss, and excellent creep resistance.

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Asia Pacific • Europe • Middle East • North America • Latin America • Africa
Filler/Reinforcement	• Glass Fiber, 50% Filler by Weight
Additive	• Flame Retardant
Features	<ul style="list-style-type: none"> • Chemical Resistant • Flame Retardant • High Flow • Low Moisture Absorption • Ultra High Stiffness • Creep Resistant • Good Dimensional Stability • High Strength • Outstanding Surface Finish
Uses	<ul style="list-style-type: none"> • Aircraft Applications • Bushings • Camera Applications • Gears • Lawn and Garden Equipment • Metal Replacement • Appliance Components • Business Equipment • Furniture • Industrial Applications • Machine/Mechanical Parts • Power/Other Tools
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Appearance	<ul style="list-style-type: none"> • Black • Natural Color • Colors Available
Processing Method	• Injection Molding

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.75	g/cm ³	ISO 1183
Water Absorption (23°C, 24 hr)	0.15	%	ISO 62
Moisture Absorption - Equil, 65% RH	1.3	%	Internal Method
Molding Shrinkage	0.1 to 0.3	%	Internal Method

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	20015	MPa	ISO 527-2
Tensile Stress (Break)	230	MPa	ISO 527-2
Tensile Strain (Break)	1.9	%	ISO 527-2
Flexural Modulus	20015	MPa	ISO 178
Flexural Stress (23°C)	341	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Notched Izod Impact	95	J/m	ASTM D256
Unnotched Izod Impact	701	J/m	ASTM D4812

Flammability	Typical Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm, Black	V-0		
1.5 mm, ALL	V-0		
1.5 mm, Black	5VA		
Oxygen Index	32	%	ISO 4589-2
Glow Wire Flammability Index			IEC 60695-2-12
0.8 mm	960	°C	

1.5 mm	960 °C	
3 mm	960 °C	
Glow Wire Ignition Temperature		IEC 60695-2-13
0.8 mm	900 °C	
1.5 mm	930 °C	
3 mm	900 °C	

Electrical Properties	Typical Value	Unit	Test Method
Volume Resistivity	> 1.0E+13	Ohms-cm	IEC 60093
Electric Strength	29	kV/mm	IEC 60243-1
Dielectric Constant (110 Hz)	4.1		IEC 60250
Dissipation Factor (110 Hz)	0.012		IEC 60250
Comparative Tracking Index	400	V	IEC 60112

Thermal Properties	Typical Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	230	°C	ISO 75-2/A
CLTE - Flow	1.70E-05	cm/cm/°C	ISO 11359-2

Processing Information	Typical Value	Unit
Processing (Melt) Temp	270	°C
Mold Temperature	120 to 140	°C
Drying Temperature	120	°C
Drying Time	0.5 to 1.5	hr
Rear Temperature	250 to 260	°C
Front Temperature	260 to 290	°C
Injection Rate	Fast	

NFD ADVANCED COMPOSITES

Hepla® H8050GF FR

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热熔温度或时间。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。

COMPANY/公司:

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