Hepla® H2010GF

Material Description:

Hepla® H2010GF is a 10% glass reinforced grade with excellent chemical resistance in combination with high stiffness and high heat resistance.

General		
Material Status	• Commercial: Active	
Availability	• Asia Pacific	• North America
	• Europe	• Latin America
	• Middle East	• Africa
Filler/Reinforcement	• Glass Fiber, 10% Filler by Weight	
Features	• Chemical Resistant	• High Heat Resistance
	• High Stiffness	• Electrical Insulation
	• Hydrolysis Stable	• Good Dimensional Stability
RoHS Compliance	• RoHS Compliant	
Processing Method	• Injection Molding	

Physical Properties	Typical Value	Unit	Test Method
Density	1.16	g/cm^3	ISO 1183
Moisture Absorption (Equilibrium, 23℃, 50% RH)	1.1	%	ISO 62
Moisture Absorption (Saturation, 23℃)	3.3	%	ISO 62
Molding Shrinkage - Flow (3.2mm)	0.3 to 0.4	%	NFD Method
Melt Mass-Flow Rate (MFR) (280℃/5.0 kg)	8	cm^3/10min	ISO 1133

Hardness	Typical Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	90		ISO 2039-1

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Modulus	4600	MPa	ISO 527-2/1
Tensile Stress, yield	78	MPa	ISO 527-2/5
Tensile Stress, break	78	MPa	ISO 527-2/5
Tensile Strain, yield	3.4	%	ISO 527-2/5
Tensile Strain, break	5.8	%	ISO 527-2/5
Flexural Modulus, 2.0 mm/min	3700	MPa	ISO 178
Flexural Stress, break, 2.0 mm/min	120	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Charpy Notched Izod Impact 23℃	5.9	kJ/m^2	ISO 179/2C
Charpy Notched Izod Impact -20℃	4	kJ/m^2	ISO 179/2C
Unnotched Izod Impact 80*10*4, 23℃	49	kJ/m^2	ISO 180/1U
Unnotched Izod Impact 80*10*4, -30℃	39.4	kJ/m^2	ISO 180/1U
Charpy Unnotched Impact Strength 80*10*4, -30℃	39.4	kJ/m^2	ISO 179/1eU
Charpy Unnotched Impact Strength 80*10*4, 23℃	59	kJ/m^2	ISO 179/1eU

Flammability	Typical Value	Unit	Test Method
Flame Rating			UL 94
3.0 mm	HB		
Oxygen Index	26	℃	ISO 4589-2

Thermal Properties	Typical Value	Unit	Test Method
Ball Pressure Test (125℃)	Pass		IEC 60695-10-2
Thermal Conductivity	0.24	W/m/K	ISO 8302
Vicat Softening Temperature	200	℃	ISO 306/B50
Vicat Softening Temperature	205	℃	ISO 306/B120
CLTE			ISO 11359-2
Flow : 23 to 60℃	6.00E-05	1/℃	
Transverse : 23 to 60℃	8.00E-05	1/℃	
RTI Elec	120	℃	UL 746
RTI Imp	60	℃	UL 746
RTI Str	125	℃	UL 746

Processing Information	Typical Value	Unit
Maximum Moisture Content	0.07	%
Hopper Temperature	60 to 80	%
Melt Temperature	280 to 298	℃
Nozzle Temperature	270 to 290	℃
Mold Temperature	80 to 100	℃
Drying Temperature	100 to 110	℃
Drying Time	2 to 3	hr
Front Temperature	280 to 298	℃
Middle Temperature	270 to 298	℃
Rear Temperature	260 to 280	℃

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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