

Hepla® H1100

Material Description:

Hepla® H1100 is a unreinforced Acrylonitrile Butadiene Styrene (ABS) product.

General	
Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Asia Pacific Europe Middle East North America Latin America Africa
Features	<ul style="list-style-type: none"> Impact Resistant Good Coloring Ability Good Processability Good Dimensional Stability High Flow Electrical Insulation
Uses	<ul style="list-style-type: none"> Appliances
RoHS Compliance	<ul style="list-style-type: none"> RoHS Compliant
Processing Method	<ul style="list-style-type: none"> Extrusion

Physical Properties	Typical Value	Unit	Test Method
Density/Specific Gravity	1.05	g/cm ³	ASTM D792
Apparent (Bulk) Density	1.05	g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR)			
200°C/5.0 kg	0.23	g/10 min	ASTM D1238
220°C/10 kg	2.8	g/10 min	ASTM D1238
220°C/10 kg	3	g/10 min	ISO 1133
Molding Shrinkage	0.4 to 0.7	%	ISO 294-4

Hardness	Typical Value	Unit	Test Method
Rockwell Hardness (R-Scale)	112		ASTM D785

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Strength			
Yield	47.2	MPa	ISO 527-2/50
Break	35.8	MPa	ISO 527-2/50
3.00mm,6.0 mm/min	48.5	MPa	ASTM D638
Tensile Elongation			
Break, 6.0 mm/min,3.00mm	49	%	ASTM D638
Break	24.5	%	ISO 527-2/50
Flexural Modulus			
6.00mm,2.8 mm/min	2462	MPa	ASTM D790
2.0 mm/min	1914	MPa	ISO 178
Flexural Strength			
6.00mm,2.8 mm/min	70	MPa	ASTM D790
2.0 mm/min	64	MPa	ISO 178

Impact Properties	Typical Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	23.6	kJ/m ²	
23°C	34	kJ/m ²	
Notched Izod Impact			
23°C, 3.20 mm	431	J/m	ASTM D256
23°C, 6.40 mm	303	J/m	ASTM D256
-30°C	21.6	kJ/m ²	ISO 180/1A
23°C	32.5	kJ/m ²	ISO 180/1A

Flammability	Typical Value	Unit	Test Method
Flame Rating (1.6 mm)	HB		UL 94

Thermal Properties	Typical Value	Unit	Test Method
Heat Deflection Temperature			
1.8 MPa, Unannealed	85	°C	ASTM D648
1.8 MPa, Unannealed	84	°C	ISO 75-2/A
1.8 MPa, Annealed	95	°C	ASTM D648
1.8 MPa, Annealed	100	°C	ISO 75-2/A
Vicat Softening Temperature			
	106	°C	ASTM D1525 ¹
	101	°C	ISO 306/A50 ¹
CLTE - Flow	8.70E-05	cm/cm/°C	ISO 11359-2

Extrusion	Typical Value	Unit
Cylinder Zone 1 Temp.	190 to 210	°C
Cylinder Zone 3 Temp.	210 to 240	°C
Cylinder Zone 5 Temp.	220 to 250	°C
Die Temperature	200 to 250	°C
Drying Temperature	80 to 85	°C
Drying Time	2 to 4	hr

NOTES:

¹ Rate A (50°C/h)

NFD ADVANCED COMPOSITES

Heppla® H1100

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的热处理温度或时间。请避免吸入或与皮肤、眼睛等接触。清扫和处理溢出的树脂，以消除滑倒的危险。

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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