# Hepla® H7225GF

**Material Description:**

Hepla® H7225GF is a Polyamide 66 (Nylon 66) product filled with 25% glass fiber. suitable for mouldings with high strength and toughness also at minus temperatures. Used in the automotive, engineering and electrical industry. It achieves higher rates of tensile strength and modulus of elasticity also in conditioning state when compared with PA 6 GF. Application: hobby tools, covers of electrotools, electromotors, cooling screws of blowers, gear wheels, carrying parts in the automotive industry like

| General | | |
|---|---|---|
| Material Status | • Commercial: Active | |
| Availability | • Asia Pacific | • North America |
| | • Europe | • Latin America |
| | • Middle East | • Africa |
| Filler/Reinforcement | • Glass Fiber, 25% Filler by Weight | |
| Features | • Chemically Coupled | • Low Temperature Toughness |
| | • High Strength | • Ultra High Toughness |
| Uses | • Automotive Applications | • Engineering Parts |
| | • Electrical/Electronic Applications | • Gears |
| Appearance | • Colors Available | • Natural Color |
| Processing Method | • Injection Molding | |

| Physical Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| Density | 1.32 | g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) 275℃/0.325 kg | 3 | g/10 min | ISO 1133 |
| Molding Shrinkage | | | STM 64 0808 |
| Across Flow | 1.2 | % | |
| Flow | 0.78 | % | |
| Water Content | 0.15 | % | ISO 960 |

| Mechanical Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| Tensile Modulus | 16000 | MPa | ISO 527-2 |
| Tensile Stress (Yield) | 175 | MPa | ISO 527-2 |
| Tensile Strain (Yield) | 3 | % | ISO 527-2 |
| Flexural Modulus | 15000 | MPa | ISO 178 |
| Flexural Stress | 255 | MPa | ISO 178 |

| Impact Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| Charpy Notched Impact Strength | | | ISO 179 |
| -20℃ | 9 | kJ/m² | |
| 23℃ | 10 | kJ/m² | |
| Charpy Unnotched Impact Strength | | | ISO 179 |
| -20℃ | 50 | kJ/m² | |
| 23℃ | 55 | kJ/m² | |

| Flammability | Typical Value | Unit | Test Method |
|---|---|---|---|
| Flame Rating | HB | | UL 94 |
| Glow Wire Ignition Temperature | 650 | ℃ | IEC 60695-2-13 |

| Electrical Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| Surface Resistivity | 1E+14 | ohms | IEC 60093 |
| Volume Resistivity | 1E+17 | ohms·cm | IEC 60093 |
| Electric Strength | 40 | kV/mm | IEC 60243-1 |
| Comparative Tracking Index | 400 | V | IEC 60112 |

| Thermal Properties | Typical Value | Unit | Test Method |
|---|---|---|---|
| Heat Deflection Temperature 0.45 MPa, Unannealed | 250 | ℃ | ISO 75-2/B |
| Vicat Softening Temperature | 250 | ℃ | ISO 306/B |
| Melting Temperature (DSC) | 260 | ℃ | ISO 3146 |

| Injection | Typical Value | Unit |
|---|---|---|
| Drying Temperature | 80 | ℃ |
| Drying Time | 4 | hr |
| Processing (Melt) Temp | 280 to 300 | ℃ |
| Mold Temperature | 60 to 90 | ℃ |
| Injection Pressure | 70.0 to 120 | MPa |



## 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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