

## BASF Capron® HPN 9333G Impact Modified, 33% Glass-Filled Nylon 6 (Conditioned) (discontinued \*\*)

Category: Polymer, Thermoplastic, Nylon, Nylon, Nylon, Nylon, Glass Filled, Impact Grade

## **Material Notes:**

Capron HPN 9333G is a 33% glass reinforced, impact modified polyamide 6 injection molding compound combining exceptional strength, stiffness and high temperature performance with excellent surface aesthetics. It is one of the High Productivity Nylon series products, offering the performance characteristics of a premium glass fiber reinforced polyamide while reducing cycle time and improving surface appearance. Capron HPN 9333G HS is generally recommended for applications such as power tool housings and under the hood components. Data provided by Allied Signal. Processing: Max. water content 0.12%. Product is supplied in sealed containers and drying is not required. If drying becomes necessary, a dehumidifying or desiccant dryer operating at 85°C (185°F). Is recommended. Drying time is dependent on moisture level. Melt Temperature: 270-295 degC (518-563 degF). Mold Temperature: 80-95 degC (176-203 degF). Injection and Packing Pressure: 35-125 bar (500-1500psi) This product can be processed over a wide range of mold temperatures; however, for applications where aesthetics critical, a mold surface temperature of 80-95 degC (176-203 degF) is required. Injection pressure controls the filling of the part and should be applied for 90% of ram travel. Packing pressure affects the final part and can be used effectively in controlling sink marks and shrinkage. It should be applied and maintained until the gate area is completely frozen off. Back pressure can be utilized to provide uniform melt consistency and reduce trapped air and gas. A maximum of 3.5 bar (50 psi) is recommended to minimize glass fiber breakage. Fast fill rates are recommended to insure uniform melt delivery to the cavity and prevent premature freezing. Surface appearance is directly affected by injection rate. Capron® is no longer a part of the BASF standard line. The BASF nylon products have been consolidated in the Ultramid ® line.

Order this product through the following link:

http://www.lookpolymers.com/polymer\_BASF-Capron-HPN-9333G-Impact-Modified-33-Glass-Filled-Nylon-6-Conditioned-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.34 g/cc	0.0484 lb/in <sup>3</sup>	(Dry)
Linear Mold Shrinkage	0.0030 cm/cm	0.0030 in/in	ASTM Data MD (Dry)
Linear Mold Shrinkage, Transverse	0.0090 cm/cm	0.0090 in/in	ISO Data (Dry)

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	100 MPa	14500 psi	ASTM data at 5 mm/min.
Tensile Strength, Yield	6.00 MPa	870 psi	ISO value; stress at 50% strain at 50 mm/min.
	98.0 MPa	14200 psi	ISO value at 50 mm/min.
	100 MPa	14500 psi	ASTM test value at 50 mm/min.
Elongation at Break	6.0 %	6.0 %	ASTM, 5 mm/minl
Elongation at Yield	5.3 %	5.3 %	ISO Value at 50 mm/min.
Elongation at Yield	5.3 %	5.3 %	ISO Value at 50 mm/min.



Mechanical Properties	Metric	English	Comments at 50 mm/min.
Tensile Modulus	6.30 GPa	914 ksi	same value from ASTM and ISO test.
Flexural Yield Strength	150 MPa	21800 psi	ASTM Data
Flexural Modulus	5.24 GPa	760 ksi	ASTM Data

Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	(Dry)

Processing Properties	Metric	English	Comments
Processing Temperature	275 °C	527 °F	See Materials Notes
Mold Temperature	95.0 °C	203 °F	See Materials Notes
Drying Temperature	85.0 °C	185 °F	See Materials Notes

## **Contact Songhan Plastic Technology Co.,Ltd.**

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