

## BASF Capron® SEG6 H1 BK-122 30% Glass-Filled Nylon 6 (Dry) (discontinued \*\*)

Category: Polymer, Thermoplastic, Nylon, Nylon 6, Nylon 6, 30% Glass Fiber Filled

## **Material Notes:**

Capron SEG6 H1 BK-122 is a black pigmented, 30% glass reinforced nylon 6 injection molding compound. This material is currently under development as XA-2678. It exhibits exceptional surface aesthetics at the slower fill speeds associated with the gas assist injection molding process. It's also suitable for conventional injection molding applications in which an aesthetic surface is difficult to attain. It maintains excellent strength, stiffness, high temperature performance and dimensional stability with a high resistance to creep under load. Other attributes are: inherent chemical resistance, particularly to greases, oils and hydrocarbons; and wide processing window.Capron SEG6 H1 BK-122 is generally recommended for applications such as metal replacements, particularly thinwall parts requiring high flow.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-SEG6-H1-BK-122-30-Glass-Filled-Nylon-6-Dry-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.35 g/cc	0.0488 lb/in <sup>3</sup>	ISO data
Water Absorption	1.4%	1.4 %	24 hrs; ISO data
Moisture Absorption at Equilibrium	2.3 %	2.3 %	50% RH; 23°C; ISO data
Water Absorption at Saturation	8.2 %	8.2 %	in water; 23°C; ISO data
Linear Mold Shrinkage	0.0030 cm/cm	0.0030 in/in	ASTM Data MD

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	150 MPa	21800 psi	ASTM data at 5 mm/min.
	152 MPa	22000 psi	ISO value at 5mm/min.
Elongation at Break	4.0 %	4.0 %	ISO, 5 mm/minl



Mechanical Properties	Metric	4 0 % English	ASTM 5 mm/minl Comments	
Flexural Yield Strength	235 MPa	34100 psi	ASTM Data	
Flexural Modulus	8.14 GPa	1180 ksi	ASTM Data	

Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	ASTM and ISO test
Deflection Temperature at 0.46 MPa (66 psi)	194 °C	381 °F	ASTM Data
Deflection Temperature at 1.8 MPa (264 psi)	214 °C	417 °F	ASTM Data

Processing Properties	Metric	English	Comments
Drying Temperature	85.0 °C	185 °F	See Materials Notes

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

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