### BASF Capron® GR40 40% Glass-Filled Nylon 6 (Conditioned) (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, 40% Glass Fiber Filled

#### Material Notes:

Capron GR40 is a 40% glass reinforced polyamide 6 injection molding compound offering the highest level of strength, stiffness, high temperature performance and dimensional stability. It is also available in heat stabilized (Capron GR40 HS) and/or pigmented versions. Capron GR40 HS is generally recommended for applications such as power tool housings, cattle ear taggers, luggage frames, fans and pressure regulator housings.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-GR40-40-Glass-Filled-Nylon-6-Conditioned-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.44 g/cc	0.0520 lb/in <sup>3</sup>	(Dry)
Linear Mold Shrinkage	0.0020 cm/cm	0.0020 in/in	ASTM Data MD (Dry)
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	ISO Data (Dry)

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	120 MPa	17400 psi	ASTM data at 5 mm/min.
	121 MPa	17500 psi	ISO value at 5mm/min.
Tensile Modulus	6.91 GPa	1000 ksi	same value from ASTM and ISO test.

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

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Hold Temperature	95.0 °C	203 °F	See Materials Notes
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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