

## BASF Capron® GR20 HS 20% Glass-Filled Nylon 6 (Conditioned) (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 20% Glass Fiber Filled

### Material Notes:

Capron GR20 HS is a heat stabilized 20% glass reinforced polyamide 6 injection molding compound possessing a balance of engineering properties combined with excellent processability and surface aesthetics. It is also available non-heat stabilized (Capron GR20) and/or pigmented versions. Capron GR20 HS is ideally suited for more demanding performance applications such as safety helmet parts, washers, gears, engine and motor parts, chutes, and higher temperature environments. 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-GR20-HS-20-Glass-Filled-Nylon-6-Conditioned-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_BASF-Capron-GR20-HS-20-Glass-Filled-Nylon-6-Conditioned-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Density	1.28 g/cc	0.0462 lb/in <sup>3</sup>	(Dry)
Linear Mold Shrinkage	0.0040 cm/cm	0.0040 in/in	ASTM Data MD (Dry)
Linear Mold Shrinkage, Transverse	0.011 cm/cm	0.011 in/in	ISO Data (Dry)

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	90.0 MPa	13100 psi	ASTM data at 5 mm/min.
	92.0 MPa	13300 psi	ISO value at 5mm/min.
Tensile Modulus	3.53 GPa	512 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

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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