

## BASF Capron® 8202 HS BK-102 Nylon 6 (Dry) (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Heat Stabilized

### Material Notes:

Capron 8202 HS BK-102 is an unfilled, heat stabilized, pigmented black, low viscosity, general purpose nylon 6 exhibiting excellent fluidity for filling thin sections. It possesses the combination of strength, stiffness and toughness properties as well as excellent chemical, thermal and abrasion resistance. The heat stabilizer system extends its retention of properties at elevated temperatures. Capron 8202 HS BK-102 is generally recommended for applications such as drapery hardware, gears, fittings, furniture casters, bearings, handles, clips and fasteners. Data provided by Allied Signal. Processing: Max. water content 0.25%. 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: 240-280 degC (464-536 degF). Mold Temperature: 80-95 degC (176-203 degF). Injection and Packing Pressure: 35-125 bar (500-1500psi) A mold temperature of 80-95 degC (176-203 degF) is recommended, but temperatures of as low as 10 degC (50 degF) can be used where applicable. 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. Fast fill rates are recommended to insure uniform melt delivery to the cavity and prevent premature freezing. 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-8202-HS-BK-102-Nylon-6-Dry-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_BASF-Capron-8202-HS-BK-102-Nylon-6-Dry-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Density	1.13 g/cc	0.0408 lb/in <sup>3</sup>	ISO data
Water Absorption	1.6 %	1.6 %	24 hrs; ISO data
Moisture Absorption at Equilibrium	2.7 %	2.7 %	50% RH; 23°C; ISO data
Water Absorption at Saturation	9.5 %	9.5 %	in water; 23°C; ISO data
Viscosity Measurement	48	48	Formic Acid Viscosity; ISO data
Linear Mold Shrinkage	0.012 cm/cm	0.012 in/in	ASTM Data MD

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	84.0 MPa	12200 psi	ISO value at 50 mm/min.
	85.0 MPa	12300 psi	ASTM value at 50 mm/min.
Elongation at Break	50 %	50 %	Nominal
	50 %	50 %	Nominal
Elongation at Yield	3.0 %	3.0 %	ISO Value at 50 mm/min.
	4.0 %	4.0 %	ASTM Value at 50 mm/min.

Mechanical Properties	Metric <sup>Pa</sup>	English <sup>psi</sup>	Comments
Flexural Modulus	2.59 GPa	376 ksi	ISO Value
	2.83 GPa	410 ksi	ASTM Value
Poissons Ratio	0.35	0.35	ISO data

Thermal Properties	Metric	English	Comments
CTE, linear	83.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	46.1 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ASTM data
	@Temperature 20.0 $^{\circ}\text{C}$	@Temperature 68.0 $^{\circ}\text{F}$	
Melting Point	220 $^{\circ}\text{C}$	428 $^{\circ}\text{F}$	ASTM and ISO test
Deflection Temperature at 0.46 MPa (66 psi)	178 $^{\circ}\text{C}$	352 $^{\circ}\text{F}$	ASTM Data
Deflection Temperature at 1.8 MPa (264 psi)	65.0 $^{\circ}\text{C}$	149 $^{\circ}\text{F}$	ASTM Data
Flammability, UL94	V-2	V-2	
	@Thickness 0.700 mm	@Thickness 0.0276 in	
	V-2	V-2	
	@Thickness 3.00 mm	@Thickness 0.118 in	

Processing Properties	Metric	English	Comments
Drying Temperature	85.0 $^{\circ}\text{C}$	185 $^{\circ}\text{F}$	See Materials Notes

## Contact Songhan Plastic Technology Co.,Ltd.

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