

## BASF Capron® 8232G HS FR BK-102 25% Glass-Filled Nylon 6 (Dry) (discontinued \*\*)

Category: Polymer, Thermoplastic, Nylon, Nylon 6, Nylon 6, Glass Fiber Filled, Flame Retardant

## **Material Notes:**

Capron 8232G HS FR BK-102 is a 25% glass fiber reinforced, heat stabilized, flame retardant pigmented black nylon 6 injection molding compound exhibiting excellent melt stability characteristics. It combines flame retardant ability with an excellent balance of high strength, stiffness and heat distortion temperature. Capron 8232G HS FR BK-102 is generally recommended for applications such as connectors, terminal blocks, switches and receptacles, coil bobbins, and appliance housings. Data provided by Allied Signal. Processing: Max. water content 0.16%. 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: 250-280 degC (482-536 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-8232G-HS-FR-BK-102-25-Glass-Filled-Nylon-6-Dry-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.62 g/cc	0.0585 lb/in³	ISO data
Moisture Absorption at Equilibrium	1.1 %	1.1 %	50% RH; 23°C; ISO data
Water Absorption at Saturation	4.0 %	4.0 %	in water; 23°C; ISO data
Viscosity Measurement	50	50	Formic Acid Viscosity; ISO data
Linear Mold Shrinkage	0.0030 cm/cm	0.0030 in/in	ASTM Data MD

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	145 MPa	21000 psi	Same value from ASTM and ISO tests; 5 mm/min.
Elongation at Break	2.5 %	2.5 %	ASTM, 5 mm/minl
	2.5 %	2.5 %	ISO, 5 mm/minl
Flexural Yield Strength	210 MPa	30500 psi	ASTM Data
Flexural Modulus	9.17 GPa	1330 ksi	ASTM Data



Mechanical Properties	0.35 Metric	English	Comments
Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	ASTM and ISO test
Deflection Temperature at 1.8 MPa (264 psi)	205 °C	401 °F	ASTM Data
Flammability, UL94	V-0	V-0	
	@Thickness 0.840 mm	@Thickness 0.0331 in	
	V-0	V-0	
	@Thickness 3.00 mm	@Thickness 0.118 in	
	5VA	5VA	
	@Thickness 2.50 mm	@Thickness 0.0984 in	

Processing Properties	Metric	English	Comments
Mold Temperature	80.0 - 95.0 °C	176 - 203 °F	
Drying Temperature	85.0 °C	185 °F	See Materials Notes
Injection Pressure	3.45 - 10.3 MPa	500 - 1500 psi	

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

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