

## BASF Capron® 8202 NL Nylon 6 (Dry) (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Unreinforced

### Material Notes:

Capron 8202 NL is an unfilled, low viscosity, non-lubricated nylon 6 injection molding homopolymer exhibiting excellent melt fluidity for filling thin sections. It is available in natural, heat stabilized and pigmented versions. It combines good strength, stiffness, and toughness as well as excellent heat, chemical and abrasion resistance. Capron 8202 NL is generally recommended for applications such as: gears, fittings, casters, bearings, clips, fasteners, plugs, caps, and filter bowls. 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-NL-Nylon-6-Dry-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_BASF-Capron-8202-NL-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, Ultimate	75.0 MPa	10900 psi	ASTM data at 5 mm/min.
Tensile Strength, Yield	80.0 MPa	11600 psi	ASTM value at 50 mm/min.
	82.0 MPa	11900 psi	ISO value at 50 mm/min.
Elongation at Break	>= 50 %	>= 50 %	Nominal
	55 %	55 %	Nominal
Elongation at Yield	4.0 %	4.0 %	ASTM Value at 50 mm/min.
			ISO Value at 50 mm/min.

Mechanical Properties	Metric	English	Comments
Tensile Modulus	3.10 GPa	450 ksi	same value from ASTM and ISO test.
Flexural Yield Strength	110 MPa	16000 psi	ASTM Data
Flexural Modulus	2.83 GPa	410 ksi	ASTM Data
Poissons Ratio	0.35	0.35	ISO data
Shear Modulus	1.10 GPa	160 ksi	calculated

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 $^{\circ}\text{F}$	Value for both ASTM and ISO data.
Deflection Temperature at 1.8 MPa (264 psi)	60.0 $^{\circ}\text{C}$	140 $^{\circ}\text{F}$	ISO data
	65.0 $^{\circ}\text{C}$	149 $^{\circ}\text{F}$	ASTM Data

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.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China