

## DuPont Performance Polymers Zytel® 73G30HSL NC010 Nylon 6 (Unverified Data\*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 30% Glass Fiber Filled

### Material Notes:

Zytel® 73G30HSL NC010 is a 30% glass fiber reinforced, heat stabilized polyamide 6 resin for injection molding. Information provided by DuPont Performance Polymers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Performance-Polymers-Zytel-73G30HSL-NC010-Nylon-6-nbspUnverified-Data.php](http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Zytel-73G30HSL-NC010-Nylon-6-nbspUnverified-Data.php)

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in <sup>3</sup>	DAM; ISO 1183
Filler Content	30 %	30 %	DAM
Water Absorption	1.9 %	1.9 %	Equilibrium 50%RH; DAM; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	6.3 %	6.3 %	Saturation, immersed; DAM; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Linear Mold Shrinkage, Flow	0.0020 cm/cm	0.0020 in/in	DAM; ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	DAM; ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Melt Index of Compound	4.0 g/10 min	4.0 g/10 min	DAM; cm <sup>3</sup> /10 min; ISO 1133
	@Load 2.16 kg, Temperature 250 °C	@Load 4.76 lb, Temperature 482 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	115 MPa	16700 psi	50%RH; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	185 MPa	26800 psi	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Break	3.5 %	3.5 %	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	6.0 %	6.0 %	50%RH; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	5.80 GPa Metric	841 ksi English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	9.70 GPa	1410 ksi	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	10.0 kJ/m <sup>2</sup>	4.76 ft-lb/in <sup>2</sup>	DAM; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	11.0 kJ/m <sup>2</sup>	5.23 ft-lb/in <sup>2</sup>	50%RH; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	15.0 kJ/m <sup>2</sup>	7.14 ft-lb/in <sup>2</sup>	DAM; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	20.0 kJ/m <sup>2</sup>	9.52 ft-lb/in <sup>2</sup>	50%RH; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	8.00 J/cm <sup>2</sup>	38.1 ft-lb/in <sup>2</sup>	DAM; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	8.40 J/cm <sup>2</sup>	40.0 ft-lb/in <sup>2</sup>	50%RH; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	10.0 J/cm <sup>2</sup>	47.6 ft-lb/in <sup>2</sup>	50%RH; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	10.0 J/cm <sup>2</sup>	47.6 ft-lb/in <sup>2</sup>	DAM; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	1.00 J/cm <sup>2</sup>	4.76 ft-lb/in <sup>2</sup>	DAM; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.60 J/cm <sup>2</sup>	7.61 ft-lb/in <sup>2</sup>	DAM; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	2.10 J/cm <sup>2</sup>	9.99 ft-lb/in <sup>2</sup>	50%RH; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	2.30 J/cm <sup>2</sup>	10.9 ft-lb/in <sup>2</sup>	50%RH; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Creep Modulus, 1 hour	6190 MPa	898000 psi	50%RH; ISO 899
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	4630 MPa	672000 psi	

Tensile Creep Modulus, 1000 hours Mechanical Properties		Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	50%RH: ISO 899 Comments
Thermal Properties	Metric	English	Comments	
CTE, linear, Parallel to Flow	500 µm/m-°C	278 µin/in-°F	DAM; ASTM E 831	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F		
	500 µm/m-°C	278 µin/in-°F	DAM; ISO 11359-1/-2	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F		
CTE, linear, Transverse to Flow	102 µm/m-°C	56.7 µin/in-°F	DAM; ASTM E 831	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F		
	102 µm/m-°C	56.7 µin/in-°F	DAM; ISO 11359-1/-2	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F		
Melting Point	221 °C	430 °F	10°C/min; DAM; ISO 11357-1/-3	
Deflection Temperature at 0.46 MPa (66 psi)	220 °C	428 °F	DAM; ISO 75-1/-2	
Deflection Temperature at 1.8 MPa (264 psi)	210 °C	410 °F	DAM; ISO 75-1/-2	
Glass Transition Temp, Tg	65.0 °C	149 °F	10°C/min; DAM; ISO 11357-1/-2	
UL RTI, Electrical	65.0 °C	149 °F	DAM; UL 746B	
	@Thickness 3.00 mm	@Thickness 0.118 in		
	65.0 °C	149 °F	DAM; UL 746B	
	@Thickness 1.50 mm	@Thickness 0.0591 in		
	65.0 °C	149 °F	DAM; UL 746B	
	@Thickness 0.750 mm	@Thickness 0.0295 in		
UL RTI, Mechanical with Impact	65.0 °C	149 °F	DAM; UL 746B	
	@Thickness 3.00 mm	@Thickness 0.118 in		
	65.0 °C	149 °F	DAM; UL 746B	
	@Thickness 1.50 mm	@Thickness 0.0591 in		
	65.0 °C	149 °F	DAM; UL 746B	
	@Thickness 0.750 mm	@Thickness 0.0295 in		
UL RTI, Mechanical without Impact	65.0 °C	149 °F	DAM; UL 746B	

Thermal Properties	@Thickness 1.50 mm Metric	@Thickness 0.0591 in English	Comments
	65.0 °C	149 °F	DAM; UL 746B
	@Thickness 0.750 mm	@Thickness 0.0295 in	
Flammability, UL94	HB	HB	DAM; IEC 60695-11-10
	@Thickness 3.00 mm	@Thickness 0.118 in	
	HB	HB	DAM; IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	DAM; IEC 60695-11-10
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	HB	HB	DAM; UL94
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	HB	HB	DAM; UL94
	@Thickness 3.00 mm	@Thickness 0.118 in	
	HB	HB	DAM; UL94
	@Thickness 1.50 mm	@Thickness 0.0591 in	

Processing Properties	Metric	English	Comments
Melt Temperature	270 °C	518 °F	DAM; Optimum
	260 - 280 °C	500 - 536 °F	DAM
Mold Temperature	70.0 - 120 °C	158 - 248 °F	DAM
	100 °C	212 °F	DAM; optimum
Drying Temperature	80.0 °C	176 °F	DAM
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	DAM
Moisture Content	<= 0.20 %	<= 0.20 %	DAM

Descriptive Properties	Value	Comments
Additive	Heat Stabilizer	DAM
	Lubricant	DAM
Appearance	Natural Color	DAM
Drying Recommended	Yes, if moisture content of resin exceeds recommended level	DAM
Features	Chemical Resistance, Good	DAM

Descriptive Properties	Value	Comments
	Fatigue Resistant	DAM
	Fuel Resistant	DAM
	Grease Resistant	DAM
	Heat Aging Resistance, Good	DAM
	Heat Stabilized	DAM
	Oil Resistant	DAM
	Thermal Aging Resistance, Good	DAM
Filler	Glass fiber reinforcement	DAM
Forms	Pellets	DAM
Generic	Nylon 6	DAM
Material Status	Current	DAM
Part Marking Code	>PA6-GF30<	ISO 11469; DAM
Polymer Family	Polyamide	DAM
Polymer Type	PA6	DAM
Processing Method	Injection Molding	DAM
Product Category	Glass Reinforced Resins	DAM
Region Available - Global	Yes	DAM
Resin Identification	PA6-GF30	ISO 1043; DAM
RoHS Compliance	Contact Manufacturer	DAM
Uses	Appliance Components	DAM
	Automotive Applications	DAM
	Electrical/Electronic Applications	DAM
	High Gloss Applications	DAM
	Industrial Applications	DAM

## 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