

DuPont Performance Polymers Zytel® 73G30L NC010 Nylon 6 (Unverified Data**)

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

Material Notes:

30% Glass Reinforced Polyamide 6 Zytel 73G30L NC010 is a 30% glass fiber reinforced 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-73G30L-NC010-Nylon-6-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in ³	DAM; ISO 1183
Water Absorption	6.3 %	6.3 %	DAM; Sim. to ISO 62
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Moisture Absorption	1.90 %	1.90 %	DAM; Sim. to ISO 62
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Viscosity Test	150 cm ³ /g	150 cm ³ /g	DAM; ISO 307 1157 1628
Linear Mold Shrinkage, Flow	0.0020 cm/cm	0.0020 in/in	DAM; ISO 294-4 2577
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	DAM; ISO 294-4 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	115 MPa	16700 psi	50%RH; ISO 527-1/-2
	185 MPa	26800 psi	DAM; ISO 527-1/-2
Tensile Stress	5.50 MPa	798 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.110036 %, Time 36000 sec	@Strain 0.110036 %, Time 10.0 hour	
	5.50 MPa	798 psi	
Tensile Stress	@Strain 0.0989091 %, Time 3600 sec	@Strain 0.0989091 %, Time 1.00 hour	50%RH; isochronous; ISO 11403-1 -2
	5.50 MPa	798 psi	
	@Strain 0.134764 %, Time 3.60e+6 sec	@Strain 0.134764 %, Time 1000 hour	
Tensile Stress	5.50 MPa	798 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.148364 %, Time 3.60e+7 sec	@Strain 0.148364 %, Time 10000 hour	

Mechanical Properties	5.50 MPa Metric	798 psi English	50%RH, isochronous; ISO 11403-1 -2 Comments
	@Strain 0.121164 %, Time 360000 sec	@Strain 0.121164 %, Time 100 hour	
	22.0 MPa	3190 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.531636 %, Time 360000 sec	@Strain 0.531636 %, Time 100 hour	
	22.0 MPa	3190 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.635491 %, Time 3.60e+7 sec	@Strain 0.635491 %, Time 10000 hour	
	22.0 MPa	3190 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.582327 %, Time 3.60e+6 sec	@Strain 0.582327 %, Time 1000 hour	
	22.0 MPa	3190 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.433964 %, Time 3600 sec	@Strain 0.433964 %, Time 1.00 hour	
	22.0 MPa	3190 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 0.480945 %, Time 36000 sec	@Strain 0.480945 %, Time 10.0 hour	
	44.0 MPa	6380 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 1.27345 %, Time 36000 sec	@Strain 1.27345 %, Time 10.0 hour	
	44.0 MPa	6380 psi	50%RH; isochronous; ISO 11403-1 -2
	@Time 3600 sec, Strain 1.15971 %	@Time 1.00 hour, Strain 1.15971 %	
	44.0 MPa	6380 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 1.48364 %, Time 3.60e+6 sec	@Strain 1.48364 %, Time 1000 hour	
	44.0 MPa	6380 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 1.58255 %, Time 3.60e+7 sec	@Strain 1.58255 %, Time 10000 hour	
	44.0 MPa	6380 psi	50%RH; isochronous; ISO 11403-1 -2
	@Strain 1.38473 %, Time 360000 sec	@Strain 1.38473 %, Time 100 hour	
Elongation at Break	3.5 %	3.5 %	DAM; ISO 527-1/-2
	6.0 %	6.0 %	50%RH; ISO 527-1/-2
Tensile Modulus	6.00 GPa	870 ksi	50%RH; ISO 527-1/-2
	9.80 GPa	1420 ksi	DAM; ISO 527-1/-2

Mechanical Properties	Metric	English	Comments
Shear Modulus	0.586 GPa	85.0 ksi	DAM; Dynamic; ISO 11403-1 -2
	@Temperature 160 °C	@Temperature 320 °F	
	0.6285 GPa	91.16 ksi	DAM; Dynamic; ISO 11403-1 -2
	@Temperature 120 °C	@Temperature 248 °F	
	0.817 GPa	118 ksi	DAM; Dynamic; ISO 11403-1 -2
	@Temperature 70.0 °C	@Temperature 158 °F	
1.857 GPa	269.3 ksi	DAM; Dynamic; ISO 11403-1 -2	
@Temperature 20.0 °C	@Temperature 68.0 °F		
1.975 GPa	286.5 ksi	DAM; Dynamic; ISO 11403-1 -2	
@Temperature -20.0 °C	@Temperature -4.00 °F		
2.081 GPa	301.8 ksi	DAM; Dynamic; ISO 11403-1 -2	
@Temperature -50.0 °C	@Temperature -58.0 °F		
Izod Impact, Notched (ISO)	15.0 kJ/m ²	7.14 ft-lb/in ²	DAM; ISO 180/1A
	20.0 kJ/m ²	9.52 ft-lb/in ²	50%RH; ISO 180/1A
	11.0 kJ/m ²	5.23 ft-lb/in ²	DAM; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	11.0 kJ/m ²	5.23 ft-lb/in ²	50%RH; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
11.0 kJ/m ²	5.23 ft-lb/in ²	DAM; ISO 180/1A	
@Temperature -40.0 °C	@Temperature -40.0 °F		
Izod Impact, Unnotched (ISO)	100 kJ/m ²	47.6 ft-lb/in ²	DAM; ISO 180/1U
	90.0 kJ/m ²	42.8 ft-lb/in ²	DAM; ISO 180/1U
@Temperature -30.0 °C	@Temperature -22.0 °F		
Charpy Impact Unnotched	9.70 J/cm ²	46.2 ft-lb/in ²	50%RH; ISO 179/1eU
	10.0 J/cm ²	47.6 ft-lb/in ²	DAM; ISO 179/1eU
	8.00 J/cm ²	38.1 ft-lb/in ²	DAM; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
8.40 J/cm ²	40.0 ft-lb/in ²	50%RH; ISO 179/1eU	
@Temperature -30.0 °C	@Temperature -22.0 °F		

Mechanical Properties ^d	Metric ¹ cm ²	English ^{1b} lb/in ²	Comments ^{79/1eA}
	2.30 J/cm ²	10.9 ft-lb/in ²	50%RH; ISO 179/1eA
	1.10 J/cm ² @Temperature -30.0 °C	5.23 ft-lb/in ² @Temperature -22.0 °F	DAM; ISO 179/1eA
	1.10 J/cm ² @Temperature -40.0 °C	5.23 ft-lb/in ² @Temperature -40.0 °F	DAM; ISO 179/1eA
	2.10 J/cm ² @Temperature -30.0 °C	9.99 ft-lb/in ² @Temperature -22.0 °F	50%RH; ISO 179/1eA
Tensile Creep Modulus, 1 hour	2590 MPa @Pressure 30.0 MPa, Temperature 100 °C	375000 psi @Pressure 4350 psi, Temperature 212 °F	DAM; ISO 11403-1 -2
	2690 MPa @Pressure 25.0 MPa, Temperature 100 °C	391000 psi @Pressure 3630 psi, Temperature 212 °F	DAM; ISO 11403-1 -2
	2816.9 MPa @Pressure 20.0 MPa, Temperature 100 °C	408560 psi @Pressure 2900 psi, Temperature 212 °F	DAM; ISO 11403-1 -2
	2900 MPa @Pressure 15.0 MPa, Temperature 100 °C	421000 psi @Pressure 2180 psi, Temperature 212 °F	DAM; ISO 11403-1 -2
	2940 MPa @Pressure 10.0 MPa, Temperature 100 °C	427000 psi @Pressure 1450 psi, Temperature 212 °F	DAM; ISO 11403-1 -2
	2960 MPa @Pressure 5.00 MPa, Temperature 100 °C	429000 psi @Pressure 725 psi, Temperature 212 °F	DAM; ISO 11403-1 -2
	3110 MPa @Pressure 55.0 MPa, Temperature 23.0 °C	451000 psi @Pressure 7980 psi, Temperature 73.4 °F	50%RH; ISO 11403-1 -2
	3420 MPa @Pressure 50.0 MPa, Temperature 23.0 °C	496000 psi @Pressure 7250 psi, Temperature 73.4 °F	50%RH; ISO 11403-1 -2
	3640 MPa @Pressure 36.0 MPa, Temperature 90.0 °C	527000 psi @Pressure 5220 psi, Temperature 194 °F	DAM; ISO 11403-1 -2

Mechanical Properties	3680 MPa Metric	534000 psi English	Comments DAM; ISO 11403-1 -2
	@Pressure 35.0 MPa, Temperature 90.0 °C	@Pressure 5080 psi, Temperature 194 °F	
	3850 MPa	558000 psi	DAM; ISO 11403-1 -2
	@Pressure 60.0 MPa, Temperature 60.0 °C	@Pressure 8700 psi, Temperature 140 °F	
	3919.9 MPa	568530 psi	DAM; ISO 11403-1 -2
	@Pressure 30.0 MPa, Temperature 90.0 °C	@Pressure 4350 psi, Temperature 194 °F	
	3950 MPa	573000 psi	DAM; ISO 11403-1 -2
	@Pressure 50.0 MPa, Temperature 60.0 °C	@Pressure 7250 psi, Temperature 140 °F	
	4010 MPa	582000 psi	DAM; ISO 11403-1 -2
	@Pressure 40.0 MPa, Temperature 60.0 °C	@Pressure 5800 psi, Temperature 140 °F	
	4050 MPa	587000 psi	50%RH; ISO 11403-1 -2
	@Pressure 40.0 MPa, Temperature 23.0 °C	@Pressure 5800 psi, Temperature 73.4 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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