

DuPont Zytel® 73G30HSL

30% Glass Reinforced, Heat Stabilized, Polyamide 6

While this product line has been acquired by Celanese, this specific grade had been discontinued while still a DuPont product so it is listed here as a discontinued DuPont product.

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in ³	DAM; ISO 1183
Moisture Absorption	2.10 % @Thickness 2.00 mm	2.10 % @Thickness 0.0787 in	DAM; Sim. to ISO 62
Viscosity Number	140 cm ³ /g	1.40 dl/g	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	110 MPa	16000 psi	50% RH; ISO 527-1/-2
	180 MPa	26100 psi	DAM; ISO 527-1/-2
Elongation at Break	3.0 %	3.0 %	DAM; ISO 527-1/-2
	6.0 %	6.0 %	50% RH; ISO 527-1/-2
Tensile Modulus	5.70 GPa	827 ksi	50% RH; ISO 527-1/-2
	9.50 GPa	1380 ksi	DAM; ISO 527-1/-2
Poissons Ratio	0.34	0.34	DAM; ISO 527-1/-2
	0.35	0.35	50%RH; ISO 527-1/-2
Izod Impact, Unnotched (ISO)	13.0 kJ/m ² @Temperature 23.0 °C	6.19 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 180/1A
	18.0 kJ/m ² @Temperature 23.0 °C	8.57 ft-lb/in ² @Temperature 73.4 °F	50% RH; ISO 180/1A
Charpy Impact Unnotched	8.50 J/cm ² @Temperature 23.0 °C	40.4 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 179/1eU
	9.00 J/cm ² @Temperature 23.0 °C	42.8 ft-lb/in ² @Temperature 73.4 °F	50% RH; ISO 179/1eU
Charpy Impact, Notched	1.40 J/cm ² @Temperature 23.0 °C	6.66 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 179/1eA
	2.00 J/cm ² @Temperature 23.0 °C	9.52 ft-lb/in ² @Temperature 73.4 °F	50% RH; ISO 179/1eA

Thermal Properties	Metric	English	Comments
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)	205 °C	401 °F	DAM; ISO 75-1/-2
Flammability, UL94	HB @Thickness 0.750 mm	HB @Thickness 0.0295 in	DAM; IEC 60695-11-10
	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	DAM; IEC 60695-11-10

Flame Spread	30.0 mm/min @Thickness 1.00 mm	1.18 in/min @Thickness 0.0394 in	ISO 3795 (FMVSS 302)
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Processing Properties	Metric	English	Comments
Melt Temperature	260 - 280 °C	500 - 536 °F	Injection
	270 °C	518 °F	Injection Optimum
Mold Temperature	70.0 - 120 °C	158 - 248 °F	Injection
	100 °C	212 °F	Injection Optimum
Drying Temperature	80.0 °C	176 °F	Injection
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	Dehumidified Dryer; Injection
Moisture Content	0.20 %	0.20 %	Injection
Hold Pressure	50.0 - 100 MPa	7250 - 14500 psi	Injection

Descriptive Properties			
Drying Recommended	yes		Injection
Emission of organic compounds	8.5 µgC/g		VDA 277
FMVSS Class	B		ISO 3795 (FMVSS 302)
Fogging F-value (refraction) (%)	95		ISO 6452; DAM
Fogging G-value (condensate) (mg)	0.1		ISO 6452; DAM
Hold pressure time (s/mm)	3		Injection
Max. screw tangential speed (m/s)	0.2		Injection
Odor	3.5		VDA 270
Part Marking Code	PA6-GF30		ISO 11469
Processing	Injection Molding		
Regional Availability	Europe		
	Near East/Africa		
Resin Identification	PA6-GF30		ISO 1043
Special characteristics	Heat stabilized or stable to heat		
Weather stability delta E	1.8		DIN 53236
Weather stability grey scale	4		ISO 105-A02