

# DuPont Zytel<sup>®</sup> 79G13L

13% Glass Reinforced, Toughened, Polyamide 66

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	1.21 g/cc	0.0437 lb/in <sup>3</sup>	DAM; ISO 1183
Melt Density	1.03 g/cc @Temperature >=263 °C	0.0372 lb/in <sup>3</sup> @Temperature >=505 °F	
Water Absorption	6.5 % @Thickness 2.00 mm	6.5 % @Thickness 0.0787 in	DAM; Sim. to ISO 62
Moisture Absorption	2.20 % @Thickness 2.00 mm	2.20 % @Thickness 0.0787 in	DAM; Sim. to ISO 62
Linear Mold Shrinkage, Flow	0.0040 cm/cm	0.0040 in/in	DAM; ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.0080 cm/cm	0.0080 in/in	DAM; ISO 294-4, 2577
Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	74	74	50% RH; ISO 2039-2
	90	90	DAM; ISO 2039-2
Hardness, Rockwell R	110	110	50% RH; ISO 2039-2
	120	120	DAM; ISO 2039-2
Tensile Strength at Break	67.0 MPa	9720 psi	50% RH; ISO 527-1/-2
	118 MPa	17100 psi	DAM; ISO 527-1/-2
Elongation at Break	4.0 %	4.0 %	DAM; ISO 527-1/-2
	10 %	10 %	50% RH; ISO 527-1/-2
Tensile Modulus	3.70 GPa	537 ksi	50% RH; ISO 527-1/-2
	5.10 GPa	740 ksi	DAM; ISO 527-1/-2
Poissons Ratio	0.35	0.35	DAM; ISO 527-1/-2
	0.36	0.36	50%RH; ISO 527-1/-2
Izod Impact, Unnotched (ISO)	4.00 kJ/m <sup>2</sup> @Temperature -30.0 °C	1.90 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	50% RH; ISO 180/1A
	6.00 kJ/m <sup>2</sup> @Temperature -30.0 °C	2.86 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	DAM; ISO 180/1A
	8.00 kJ/m <sup>2</sup> @Temperature 23.0 °C	3.81 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	DAM; ISO 180/1A
	9.00 kJ/m <sup>2</sup> @Temperature 23.0 °C	4.28 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	50% RH; ISO 180/1A
Charpy Impact Unnotched	5.40 J/cm <sup>2</sup> @Temperature -30.0 °C	25.7 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	50% RH; ISO 179/1eU
	5.90 J/cm <sup>2</sup> @Temperature 23.0 °C	28.1 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	50% RH; ISO 179/1eU
	5.90 J/cm <sup>2</sup> @Temperature -30.0 °C	28.1 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	DAM; ISO 179/1eU
	6.70 J/cm <sup>2</sup> @Temperature 23.0 °C	31.9 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	DAM; ISO 179/1eU
Charpy Impact, Notched	0.600 J/cm <sup>2</sup> @Temperature -30.0 °C	2.86 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	50% RH; ISO 179/1eA
	0.600 J/cm <sup>2</sup> @Temperature -30.0 °C	2.86 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	DAM; ISO 179/1eA
	0.800 J/cm <sup>2</sup> @Temperature 23.0 °C	3.81 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	DAM; ISO 179/1eA
	1.40 J/cm <sup>2</sup> @Temperature 23.0 °C	6.66 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	50% RH; ISO 179/1eA
Tensile Creep Modulus, 1 hour	4030 MPa	585000 psi	50% RH; ISO 899-1
Tensile Creep Modulus, 1000 hours	3180 MPa	461000 psi	50% RH; ISO 899-1