

DuPont Zytel® 70G25HSL

25% Glass Reinforced, Heat Stabilized, 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	1.33 g/cc	0.0480 lb/in ³	DAM; ISO 1183
Water Absorption	6.4 % @Thickness 2.00 mm	6.4 % @Thickness 0.0787 in	DAM; Sim. to ISO 62
Moisture Absorption	2.00 % @Thickness 2.00 mm	2.00 % @Thickness 0.0787 in	DAM; Sim. to ISO 62
Viscosity Number	150 cm ³ /g	1.50 dl/g	DAM; ISO 307, 1157, 1628
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	DAM; ISO 294-4, 2577

Linear Mold Shrinkage, Transverse	0.011 cm/cm	0.011 in/in	DAM; ISO 294-4, 2577
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Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	87	87	50% RH; ISO 2039-2
	103	103	DAM; ISO 2039-2
Hardness, Rockwell R	116	116	50% RH; ISO 2039-2
	123	123	DAM; ISO 2039-2
Ball Indentation Hardness	260 MPa	37700 psi	H 961/30; ISO 2039-1
Tensile Strength at Break	120 MPa	17400 psi	50% RH; ISO 527-1/-2
	190 MPa	27600 psi	DAM; ISO 527-1/-2
Elongation at Break	3.1 %	3.1 %	DAM; ISO 527-1/-2
	5.0 %	5.0 %	50% RH; ISO 527-1/-2
Tensile Modulus	6.00 GPa	870 ksi	50% RH; ISO 527-1/-2
	8.50 GPa	1230 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)	8.00 kJ/m ² @Temperature -30.0 °C	3.81 ft-lb/in ² @Temperature -22.0 °F	50% RH; ISO 180/1A
	8.00 kJ/m ² @Temperature -30.0 °C	3.81 ft-lb/in ² @Temperature -22.0 °F	DAM; ISO 180/1A
	10.0 kJ/m ² @Temperature 23.0 °C	4.76 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 180/1A
	11.0 kJ/m ² @Temperature 23.0 °C	5.23 ft-lb/in ² @Temperature 73.4 °F	50% RH; ISO 180/1A
Charpy Impact Unnotched	5.00 J/cm ² @Temperature -30.0 °C	23.8 ft-lb/in ² @Temperature -22.0 °F	50% RH; ISO 179/1eU
	5.00 J/cm ² @Temperature -30.0 °C	23.8 ft-lb/in ² @Temperature -22.0 °F	DAM; ISO 179/1eU
	7.00 J/cm ² @Temperature 23.0 °C	33.3 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	1.00 J/cm ² @Temperature 23.0 °C	4.76 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 179/1eA
	1.00 J/cm ² @Temperature -30.0 °C	4.76 ft-lb/in ² @Temperature -22.0 °F	DAM; ISO 179/1eA
	1.10 J/cm ² @Temperature -30.0 °C	5.23 ft-lb/in ² @Temperature -22.0 °F	50% RH; ISO 179/1eA
	1.20 J/cm ² @Temperature 23.0 °C	5.71 ft-lb/in ² @Temperature 73.4 °F	50% RH; ISO 179/1eA
Tensile Creep Modulus, 1 hour	5000 MPa	725000 psi	50% RH; ISO 899-1
Tensile Creep Modulus, 1000 hours	4100 MPa	595000 psi	50% RH; ISO 899-1