

# DuPont Performance Polymers Zytel® FR70G25V0 NC010 Nylon 66 (Unverified Data\*\*)

Polymer, Thermoplastic, Nylon, Nylon 66, Nylon 66, 30% Glass Fiber Filled

## DuPont Performance Polymers

### 产品说明

25% Glass Reinforced Flame Retardant Polyamide 66 Zytel FR70G25V0 NC010 is a 25% glass fiber reinforced heat stabilized flame retardant polyamide 66 resin for injection molding. Information provided by DuPont Performance Polymers

物理性能	额定值 (公制)	额定值 (英制)	测试方法
密度	1.35 g/cc	0.0488 lb/in <sup>3</sup>	
	1.49 g/cc	0.0538 lb/in <sup>3</sup>	DAM; ISO 1183
吸水率	3.4 % @ Thickness 2.00 mm	3.4 % @ Thickness 0.0787 in	DAM; Sim. to ISO 62
	0.900 % @ Thickness 2.00 mm	0.900 % @ Thickness 0.0787 in	DAM; Sim. to ISO 62
粘度	85370 cP @ Shear Rate 5000 1/s, Temperature 280 °C	85370 cP @ Shear Rate 5000 1/s, Temperature 536 °F	ISO 11403-1 -2
	138900 cP @ Shear Rate 5000 1/s, Temperature 270 °C	138900 cP @ Shear Rate 5000 1/s, Temperature 518 °F	ISO 11403-1 -2
	243400 cP @ Shear Rate 5000 1/s, Temperature 260 °C	243400 cP @ Shear Rate 5000 1/s, Temperature 500 °F	ISO 11403-1 -2
	270750 cP @ Shear Rate 500 1/s, Temperature 280 °C	270750 cP @ Shear Rate 500 1/s, Temperature 536 °F	ISO 11403-1 -2
	441600 cP @ Shear Rate 500 1/s, Temperature 270 °C	441600 cP @ Shear Rate 500 1/s, Temperature 518 °F	ISO 11403-1 -2
	774800 cP @ Shear Rate 500 1/s, Temperature 260 °C	774800 cP @ Shear Rate 500 1/s, Temperature 500 °F	ISO 11403-1 -2
	140 cm <sup>3</sup> /g	140 cm <sup>3</sup> /g	DAM; ISO 307 1157 1628
线性成型收缩率, Flow	0.0020 cm/cm	0.0020 in/in	DAM; ISO 294-4 2577
线性成型收缩率, 横向	0.010 cm/cm	0.010 in/in	DAM; ISO 294-4 2577
机械性能	额定值 (公制)	额定值 (英制)	测试方法
抗张强度(断裂)	110 MPa	16000 psi	50%RH; ISO 527-1/-2
	125 MPa	18100 psi	DAM; ISO 527-1/-2
抗张强度	8.79 MPa @ Strain 0.230 %, Temperature 150 °C	1270 psi @ Strain 0.230 %, Temperature 302 °F	DAM; ISO 11403-1 -2
	12.0 MPa @ Strain 0.240 %, Temperature 90.0 °C	1740 psi @ Strain 0.240 %, Temperature 194 °F	DAM; ISO 11403-1 -2
	15.95 MPa @ Strain 0.470 %, Temperature 150 °C	2313 psi @ Strain 0.470 %, Temperature 302 °F	50%RH; ISO 11403-1 -2
	22.76 MPa @ Strain 0.480 %, Temperature 90.0 °C	3301 psi @ Strain 0.480 %, Temperature 194 °F	50%RH; ISO 11403-1 -2
	24.06 MPa @ Strain 0.700 %, Temperature 150 °C	3490 psi @ Strain 0.700 %, Temperature 302 °F	DAM; ISO 11403-1 -2
	25.92 MPa @ Strain 0.400 %, Temperature 40.0 °C	3759 psi @ Strain 0.400 %, Temperature 104 °F	50%RH; ISO 11403-1 -2
	31.12 MPa @ Strain 1.10 %, Temperature 150 °C	4514 psi @ Strain 1.10 %, Temperature 302 °F	50%RH; ISO 11403-1 -2
	34.25 MPa @ Strain 0.790 %, Temperature 90.0 °C	4968 psi @ Strain 0.790 %, Temperature 194 °F	DAM; ISO 11403-1 -2
	37.13 MPa @ Strain 0.540 %, Temperature 40.0 °C	5385 psi @ Strain 0.540 %, Temperature 104 °F	DAM; ISO 11403-1 -2
	41.37 MPa @ Strain 0.570 %, Temperature 23.0 °C	6000 psi @ Strain 0.570 %, Temperature 73.4 °F	50%RH; ISO 11403-1 -2
	41.5 MPa @ Strain 0.470 %, Temperature 23.0 °C	6020 psi @ Strain 0.470 %, Temperature 73.4 °F	DAM; ISO 11403-1 -2
	42.25 MPa @ Strain 1.55 %, Temperature 150 °C	6128 psi @ Strain 1.55 %, Temperature 302 °F	DAM; ISO 11403-1 -2
	44.11 MPa @ Strain 2.01 %, Temperature 150 °C	6398 psi @ Strain 2.01 %, Temperature 302 °F	50%RH; ISO 11403-1 -2

	44.88 MPa @ Strain 1.15 %, Temperature 90.0 °C	6509 psi @ Strain 1.15 %, Temperature 194 °F	50%RH; ISO 11403-1 -2
	52.61 MPa @ Strain 3.26 %, Temperature 150 °C	7630 psi @ Strain 3.26 %, Temperature 302 °F	50%RH; ISO 11403-1 -2
	54.28 MPa @ Strain 0.980 %, Temperature 40.0 °C	7873 psi @ Strain 0.980 %, Temperature 104 °F	50%RH; ISO 11403-1 -2
	55.02 MPa @ Strain 2.75 %, Temperature 150 °C	7980 psi @ Strain 2.75 %, Temperature 302 °F	DAM; ISO 11403-1 -2
	57.51 MPa @ Strain 1.63 %, Temperature 90.0 °C	8341 psi @ Strain 1.63 %, Temperature 194 °F	DAM; ISO 11403-1 -2
	63.12 MPa @ Strain 2.08 %, Temperature 90.0 °C	9155 psi @ Strain 2.08 %, Temperature 194 °F	50%RH; ISO 11403-1 -2
	63.72 MPa @ Strain 0.650 %, Temperature -20.0 °C	9242 psi @ Strain 0.650 %, Temperature -4.00 °F	50%RH; ISO 11403-1 -2
	67.98 MPa @ Strain 0.820 %, Temperature 0.000 °C	9860 psi @ Strain 0.820 %, Temperature 32.0 °F	50%RH; ISO 11403-1 -2
	71.93 MPa @ Strain 3.50 %, Temperature 90.0 °C	10430 psi @ Strain 3.50 %, Temperature 194 °F	50%RH; ISO 11403-1 -2
	72.3 MPa @ Strain 0.770 %, Temperature 0.000 °C	10500 psi @ Strain 0.770 %, Temperature 32.0 °F	DAM; ISO 11403-1 -2
	73.4 MPa @ Strain 1.26 %, Temperature 40.0 °C	10600 psi @ Strain 1.26 %, Temperature 104 °F	DAM; ISO 11403-1 -2
	73.91 MPa @ Strain 1.18 %, Temperature 23.0 °C	10720 psi @ Strain 1.18 %, Temperature 73.4 °F	50%RH; ISO 11403-1 -2
	74.49 MPa @ Strain 2.80 %, Temperature 90.0 °C	10800 psi @ Strain 2.80 %, Temperature 194 °F	DAM; ISO 11403-1 -2
	78.89 MPa @ Strain 0.830 %, Temperature -20.0 °C	11440 psi @ Strain 0.830 %, Temperature -4.00 °F	DAM; ISO 11403-1 -2
	79.11 MPa @ Strain 1.75 %, Temperature 40.0 °C	11470 psi @ Strain 1.75 %, Temperature 104 °F	50%RH; ISO 11403-1 -2
	84.04 MPa @ Strain 1.04 %, Temperature 23.0 °C	12190 psi @ Strain 1.04 %, Temperature 73.4 °F	DAM; ISO 11403-1 -2
	94.42 MPa @ Strain 2.82 %, Temperature 40.0 °C	13690 psi @ Strain 2.82 %, Temperature 104 °F	50%RH; ISO 11403-1 -2
	100.33 MPa @ Strain 1.96 %, Temperature 23.0 °C	14552 psi @ Strain 1.96 %, Temperature 73.4 °F	50%RH; ISO 11403-1 -2
	100.68 MPa @ Strain 1.34 %, Temperature 0.000 °C	14602 psi @ Strain 1.34 %, Temperature 32.0 °F	50%RH; ISO 11403-1 -2
	100.92 MPa @ Strain 2.18 %, Temperature 40.0 °C	14637 psi @ Strain 2.18 %, Temperature 104 °F	DAM; ISO 11403-1 -2
	101.62 MPa @ Strain 1.11 %, Temperature -20.0 °C	14739 psi @ Strain 1.11 %, Temperature -4.00 °F	50%RH; ISO 11403-1 -2
	118.66 MPa @ Strain 1.78 %, Temperature 23.0 °C	17210 psi @ Strain 1.78 %, Temperature 73.4 °F	DAM; ISO 11403-1 -2
	120.54 MPa @ Strain 1.46 %, Temperature 0.000 °C	17483 psi @ Strain 1.46 %, Temperature 32.0 °F	DAM; ISO 11403-1 -2
	127.28 MPa @ Strain 1.98 %, Temperature 0.000 °C	18460 psi @ Strain 1.98 %, Temperature 32.0 °F	50%RH; ISO 11403-1 -2
	134.63 MPa @ Strain 1.66 %, Temperature -20.0 °C	19526 psi @ Strain 1.66 %, Temperature -4.00 °F	50%RH; ISO 11403-1 -2
	142.85 MPa @ Strain 1.74 %, Temperature -20.0 °C	20719 psi @ Strain 1.74 %, Temperature -4.00 °F	DAM; ISO 11403-1 -2
	157.09 MPa @ Strain 2.33 %, Temperature 0.000 °C	22784 psi @ Strain 2.33 %, Temperature 32.0 °F	DAM; ISO 11403-1 -2
伸长率 (断裂)	2.0 %	2.0 %	DAM; ISO 527-1/-2
	2.6 %	2.6 %	50%RH; ISO 527-1/-2
拉伸模量	7.50 GPa	1090 ksi	50%RH; ISO 527-1/-2
	9.00 GPa	1310 ksi	DAM; ISO 527-1/-2
	3.213 GPa @ Temperature 150 °C	466.0 ksi @ Temperature 302 °F	50%RH; ISO 11403-1 -2
	3.595 GPa @ Temperature 150 °C	521.4 ksi @ Temperature 302 °F	DAM; ISO 11403-1 -2
	5.515 GPa @ Temperature 60.0 °C	799.9 ksi @ Temperature 140 °F	50%RH; ISO 11403-1 -2
	5.62 GPa @ Temperature 60.0 °C	815 ksi @ Temperature 140 °F	DAM; ISO 11403-1 -2
	10.386 GPa @ Temperature -20.0 °C	1506.4 ksi @ Temperature -4.00 °F	50%RH; ISO 11403-1 -2

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	<b>10.498 GPa</b> @ Temperature -20.0 °C	<b>1522.6 ksi</b> @ Temperature -4.00 °F	<b>DAM; ISO 11403-1 -2</b>
<b>割线模量</b>	<b>4.16 GPa</b> @ Strain 2.06 %, Temperature 40.0 °C	<b>603 ksi</b> @ Strain 2.06 %, Temperature 104 °F	<b>50%RH; ISO 11403-1 -2</b>

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