

# DuPont™ Zytel® HTN54G35HSLR NC010

## HIGH PERFORMANCE POLYAMIDE RESIN

### Product Information

Zytel® HTN high performance polyamide resins feature high retention of properties upon exposure to elevated temperature, to high moisture, and to harsh chemical environments. Polymer families and grades of Zytel® HTN are tailored to optimize performance as well as processability.

Typical applications with Zytel® HTN include demanding applications in the automotive, electrical and electronics, domestic appliances, and construction industries.

**Zytel® HTN54G35HSLR NC010 is a 35% glass reinforced, toughened, heat stabilized high performance polyamide resin. It is also a PPA resin.**

General information	Value	Unit	Test Standard
Resin Identification	PA-IGF35	-	ISO 1043
Part Marking Code	PA-IGF35	-	ISO 11469
Part Marking Code	>PPA-IGF35<	-	SAE J1344
Rheological properties	dry / cond	Unit	Test Standard
Molding shrinkage, parallel	0.2 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / -	%	ISO 294-4, 2577
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	10000 / -	MPa	ISO 527-1/-2
Stress at break	180 / -	MPa	ISO 527-1/-2
Strain at break	3 / -	%	ISO 527-1/-2
Flexural Modulus	9000 / -	MPa	ISO 178
Poisson's ratio	0.38 / -	-	ISO 527-1/-2
Tensile creep modulus			ISO 899-1
1h	* / 11000	MPa	
1000h	* / 10000	MPa	
Charpy impact strength, 73°F	75 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength			ISO 179/1eA
73°F	12 / 11	kJ/m <sup>2</sup>	
-40°F	9 / -	kJ/m <sup>2</sup>	
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, first heat	300 / *	°C	ISO 11357-1/-3
Temp. of deflection under load			ISO 75-1/-2
260 psi	255 / *	°C	
65 psi	285 / *	°C	
Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion			ISO 11359-1/-2
normal	72 / *	E-6/K	
Normal, -40-23°C	75 / *	E-6/K	
Parallel, -40-23°C	20 / *	E-6/K	
Thermal conductivity solid	0.35	W/(m K)	-
Flammability	Value	Unit	Test Standard
FMVSS Class	SE	-	ISO 3795 (FMVSS 302)
Electrical properties	dry / cond	Unit	Test Standard
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	43 / 42	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
Other properties	dry / cond	Unit	Test Standard
Density	1420 / -	kg/m <sup>3</sup>	ISO 1183
Injection	Value	Unit	Test Standard
Drying Recommended	yes	-	-
Drying Temperature	100	°C	-
Drying Time, Dehumidified Dryer	6 - 8	h	-

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To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

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Processing Moisture Content	≤0.1	%	-
Melt Temperature Optimum	325	°C	-
Min. melt temperature	320	°C	-
Max. melt temperature	330	°C	-
Min. mold temperature	90	°C	-
Max. mold temperature	130	°C	-

Characteristics			
Processing	• Injection Molding		
Delivery form	• Pellets		
Additives	• Lubricants	• Release agent	
Special characteristics	• Heat stabilized or stable to heat		
Regional Availability	• North America • Europe	• Asia Pacific • South and Central America	• Near East/Africa • Global

### Processing Texts

#### Injection molding

During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the holdup time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 160 mil (Hytrel® measured at 80 mil), IEC Electrical properties measured at 80 mil, all ASTM properties measured at 120 mil, and test temperatures are 73°F unless otherwise stated.

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