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 stabilised 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**
Moulding shrinkage, parallel	0.2 / -	%	ISO 294-4, 2577
Moulding 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, 23°C	75 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength			ISO 179/1eA
23°C	12 / 11	kJ/m²	
-40°C	9 / -	kJ/m²	
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
1.8 MPa	255 / *	°C	
0.45 MPa	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/m³	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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Processing Moisture Content	≤0.1	%	-
Melt Temperature Optimum	325	°C	-
Min. melt temperature	320	°C	-
Max. melt temperature	330	°C	-
Min. mould temperature	90	°C	-
Max. mould temperature	130	°C	-

Characteristics

Processing	• Injection Moulding		
Delivery form	• Pellets		
Additives Special	• Lubricants	• Release agent	
characteristics	• Heat stabilised 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 an limit the holdup time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.