

Zytel® HTNFR55G55NHLW BK337 (DEVELOPMENTAL)

HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTNFR55G55NHLW BK337 is a 57% glass reinforced, flame retardant high performance polyamide resin with improved flow and low warpage in structural applications. It is also a PPA resin and uses a non-halogenated flame retardant.

Product information

Part Marking Code >PPA-GF57FR< SAE J1344

Rheological properties

	dry/cond.		
Moulding shrinkage, parallel	0.1 / -	%	ISO 294-4, 2577
Moulding shrinkage, normal	0.2 / -	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile Modulus	21000 / -	MPa	ISO 527-1/-2
Stress at break, 5mm/min	220 / -	MPa	ISO 527-1/-2
Strain at break, 5mm/min	1.5 / -	%	ISO 527-1/-2
Flexural Modulus	20000 / -	MPa	ISO 178
Flexural Strength	330 / -	MPa	ISO 178
Charpy impact strength, 23°C	60 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	15 / -	kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 / -		

Thermal properties

	dry/cond.		
Melting temperature, first heat	297 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	230 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	260 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	V-0 / *	class	UL 94
Thickness tested	1.5 / *	mm	UL 94
UL recognition	yes / *		UL 94
Burning Behav. at thickness h	V-0 / *	class	UL 94
Thickness tested	0.75 / *	mm	UL 94
UL recognition	yes / *		UL 94

Other properties

	dry/cond.		
Density	1720 / -	kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	6 - 8 h
Processing Moisture Content	≤0.1 %

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Min. melt temperature	300 °C
Max. melt temperature	315 °C
Min. mould temperature	70 °C
Max. mould temperature	130 °C

Characteristics

Additives	Flame retardant
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Additional information

Injection molding	For molding machine components, use corrosion resistant and wear resistant steel. For details please contact our representative. Limit the residence time of the resin in the machine. Use proper protective equipment and adequate ventilation.
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