Zytel® HTN51G35EFT BK083LM

HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTN51G35EFT BK083LM is a 35% glass reinforced, heat stabilized, lubricated, hydrolysis resistant, impact modified and laser markable high performance polyamide resin developed for automotive, electrical and electronics applications. It is also a PPA resin.

Product information

Resin Identification	PA6T/XT-I-GF35	ISO 1043
Part Marking Code	>PA6T/XT-I-GF35<	ISO 11469
Part Marking Code	>PA6T/XT-I-GF35<	SAE J1344

Rheological properties

	dry/cond.		
Molding shrinkage, parallel	0.2 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / -	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	1.62E6 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	30500 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.8 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	41.9 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.66 / -	ftlb/in²	ISO 179/1eA

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	572 / *	°F	ISO 11357-1/-3
Coefficient of linear thermal expansion (CLTE), parallel	0.11 / *	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), parallel, -40-23°C	0.0833 / *	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), parallel, 55-160°C	0.106 / *	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.35 / *	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal, -40-23°C	0.267 / *	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal, 55-160°C	0.383 / *	E-4/°F	ISO 11359-1/-2

Electrical properties

	dry/cond.	
Comparative tracking index	600 / -	IEC 60112

Physical/Other properties

	dry/cond.		
Density	0.0513 / -	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	212	°F
Drying Time, Dehumidified Dryer	6 - 8	h
Processing Moisture Content	≤0.1	%

Revised: 2026-06-18 Source: Celanese Materials Database

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Melt Temperature Optimum	617	°F
Min. melt temperature	608	°F
Max. melt temperature	626	°F
Mold Temperature Optimum	302	°F
Min. mold temperature	284[1]	°F
Max. mold temperature	356	°F

[1]: Higher temperature needed for thinner sections.

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified, Hydrolysis resistant, Laser Markable

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