Zytel® HTN7550GF

HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTN7550GF is a glass fiber 50%-reinforced PA.MXD6 grade. It is suitable for applications such as automotive, electrical & electronics, and consumer parts.

Product information

Resin Identification	PAMXD6-GF50	ISO 1043
Part Marking Code	>PAMXD6-GF50<	ISO 11469

Rheological properties

Molding shrinkage range, parallel	0.2 - 0.3	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile stress at break, 5mm/min	43500 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2 / -	%	ISO 527-1/-2
Flexural modulus	2.68E6 / -	psi	ISO 178
Flexural strength	61600 / -	psi	ISO 178
Charpy notched impact strength, 23 °C	6.42 / -	ftlb/in²	ISO 179/1eA

Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	460 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	450 / *	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.09 / *	E-4/°F	ISO 11359-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.0315 / *	in	IEC 60695-11-10

Electrical properties

	dry/cond.		
Relative permittivity, 100Hz	4.5 / -		IEC 62631-2-1
Relative permittivity, 1MHz	4.7 / -		IEC 62631-2-1
Dissipation factor, 100Hz	980 / -	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	240 / -	E-4	IEC 62631-2-1
Volume resistivity	1E14 / -	Ohm.m	IEC 62631-3-1
Surface resistivity	* / 3E16	Ohm	IEC 62631-3-2
Electric strength	457 / -	kV/in	IEC 60243-1

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	0.17 / *	%	Sim. to ISO 62
Density	0.0596 / -	lb/in³	ISO 1183

Characteristics

Processing	Injection Molding

Revised: 2025-09-11 Source: Celanese Materials Database

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Additional information

Injection molding

Preprocessing

The maximum humidity content allowed for the injection molding process is 0.10%. The drying time depends on the initial moisture content and the drying conditions used. Generally 4-6 hours at 80°C (176ºF) at a dehumidifier dryer or 6-8 hours at 90ºC (194ºF) at a dryer are sufficient.

Processing

The following conditions apply to the normal injection molding process of MAXIMID compounds. Machine temperatures: barrel 250-280°C (482-536ºF), nozzle and hot runners 270-280°C (518-536ºF). Mold temperatures: 120-140°C (248-284ºF). Back pressure: typically 5-10 bar. In case of gas generation in the melt, please verify moisture content and processing temperatures. For further details, please contact our technical support team.

Processing Notes

Pre-Drying

It is recommended to dry material at 80ºC (176ºF) for 4-6h at dehumidified dryer.
It is recommended to dry material at 90ºC (194ºF) for 6-8h at dryer.
suggested max. moisture = 0.10%

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