Zytel® RS 32G10DO BK236 (PRELIMINARY)

LONG CHAIN POLYAMIDE RESIN

Zytel® RS 32G10DO BK236 is a glass reinforced, low density polyamide 610 resin with improved radio frequency performance, developed for light-weight structural application.

Product information

Resin Identification	PA610-(GB+GF)25	ISO 1043
Part Marking Code	>PA610-(GB+GF)25<	ISO 11469
Biobased carbon content	≥50[C] %	ISO 16620-2

[C]: Calculated

Rheological properties

Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	725000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	16000	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	4.2	%	ISO 527-1/-2
Charpy impact strength, 23°C	23.3	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	2.33	ftlb/in²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	432	°F	ISO 11357-1/-3
Glass transition temperature, 10°C/min	140	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	360	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	419	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.21	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), parallel, -40-23°C	0.139	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), parallel, 55-160°C	0.239	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.378	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal, -40-23°C	0.261	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal, 55-160°C	0.694	E-4/°F	ISO 11359-1/-2

Flammability

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

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

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Electrical properties

Relative permittivity, 2GHz	2.7		IEC 61189-2-721
Dissipation factor, 2GHz	106	E-4	IEC 61189-2-721
Volume resistivity	>1E13	Ohm.m	IEC 62631-3-1
Electric strength	762	kV/in	IEC 60243-1

Physical/Other properties

Humidity absorption, 2mm	1.6	%	Sim. to ISO 62
Density	0.0354	lb/in^3	ISO 1183

Injection

Drying Temperature	176	°F
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	≤0.15	%
Melt Temperature Optimum	518	°F
Min. melt temperature	500	°F
Max. melt temperature	554	°F
Mold Temperature Optimum	194	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F

Characteristics

Processing	Injection Molding
Sustainability	Bio-Content

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The above data are preliminary and are subject to change as additional data are developed on subsequent lots.
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