Zytel® RS 30GB20T NC010 (PRELIMINARY)

LONG CHAIN POLYAMIDE RESIN

Zytel® RS 30GB20T NC010 is a glass reinforced, toughened, low density, biobased polyamide 610 resin with improved radio frequency performance.

Product information

Resin Identification	PA610-I-(GB+GF)20		ISO 1043
Part Marking Code	>PA610-I-(GB+GF)20<		ISO 11469
Biobased carbon content	≥40[C]	%	ISO 16620-2

[C]: Calculated

Rheological properties

	dry/cond.		
Molding shrinkage, parallel	1.1 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / -	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	305000 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	5800 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	26 / -	%	ISO 527-1/-2
Flexural modulus	290000 / -	psi	ISO 178
Flexural strength	8700[1] / -	psi	ISO 178
Charpy impact strength, 23 °C	80.9 / -	ftlb/in²	ISO 179/1eU
Charpy impact strength, -30 °C	71.4 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23 °C	5.23 / -	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -40 °C	3.33 / -	ftlb/in²	ISO 179/1eA

[1]: 5% strain

Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	433 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	147 / *	°F	ISO 75-1/-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, 2GHz	2.3 / -		IEC 61189-2-721
Dissipation factor, 2GHz	70 / -	E-4	IEC 61189-2-721

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	0.8 / *[C]	%	Sim. to ISO 62
Water absorption, 2mm	1.9 / *[C]	%	Sim. to ISO 62
Density	0.0303 / -	lb/in³	ISO 1183

[C]: Calculated

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

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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
Max. screw tangential speed	Low-Medium - Medium-High	m/s
Mold Temperature Optimum	194	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F
Hold pressure range	as low as possible - 20 to 40% of max injection pressure	psi
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h^2+2	s

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified

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