

Product Texts

Common features of Zytel® nylon resin include mechanical and physical properties such as high mechanical strength, excellent balance of stiffness and toughness, good high temperature performance, good electrical and flammability properties, good abrasion and chemical resistance. In addition, Zytel® nylon resins are available in different modified and reinforced grades to create a wide range of products with tailored properties for specific processes and end-uses. Zytel® nylon resin, including most flame retardant grades, offer the ability to be coloured.

The good melt stability of Zytel® nylon resin normally enables the recycling of properly handled production waste. If recycling is not possible, we recommend, as the preferred option, incineration with energy recovery (-31 kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

Zytel® nylon resin typically is used in demanding applications in the automotive, furniture, domestic appliances, sporting goods and construction industry.

Zytel® 70G30L NC010 is a 30% glass fiber reinforced polyamide 66 resin for injection molding.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
^[C] Density of melt	1210	kg/m ³	-
^[C] Thermal conductivity of melt	0.21	W/(m K)	-
^[C] Spec. heat capacity of melt	2290	J/(kg K)	-
^[C] Eff. thermal diffusivity	6.85E-8	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10000 / 7000	MPa	ISO 527
^[C] Stress at break	190 / 130	MPa	ISO 527
^[C] Strain at break	3.5 / 5	%	ISO 527
^[C] Charpy impact strength, +23°C	70 / 80	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	60 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	12 / 15	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10 / 10	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	262 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	253 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	260 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	28 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	95 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.7 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning rate, FMVSS, Thickness 1 mm	24	mm/min	ISO 3795 (FMVSS 302)
^[C] Oxygen index	24 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Dissipation factor, 100Hz	160 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	160 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E11 / -	Ohm*m	IEC 62631-3-1

Zytel® 70G30L NC010

PA66-GF30

Celanese

[C] Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	6.9 / *	%	Sim. to ISO 62
[C] Humidity absorption	2 / *	%	Sim. to ISO 62
[C] Density	1370 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Viscosity number	153 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Additives

Lubricants, Release agent

Delivery form

Pellets, Natural Color

Regional Availability

North America, Europe, Asia Pacific, South and Central America