

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 (-31kJ/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® PLS95G35DH1 NC010 is a high flow, 35% glass fiber reinforced, SHIELD protected polyamide resin for injection molding. It provides excellent surface appearance, excellent welding, excellent fatigue retention and exceptional resistance to hot air and hot oil.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577
^[C] Ejection temperature	210	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	11000 / 8000	MPa	ISO 527
^[C] Stress at break	205 / 148	MPa	ISO 527
^[C] Strain at break	3.1 / 5.4	%	ISO 527
^[C] Charpy impact strength, +23°C	75 / 90	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	70 / 70	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	12 / 14	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	11 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	269 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	80 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	245 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	266 / *	°C	ISO 75-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
^[C] Burning rate, FMVSS, Thickness 1 mm	25	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	6 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.8 / *	%	Sim. to ISO 62
^[C] Density	1430 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	125 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Heat stabilized or stable to heat

Features

Fatigue Resistance, Weldable

Chemical Resistance

General Chemical Resistance, Oil Resistance

Applications

Automotive, Sports Equipment

Regional Availability

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