

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® PLS95G50DH2 BK261 is a high flow 50% glass reinforced PA nylon resin using our SHIELD Technology, providing exceptional Heat Resistance & High stiffness for automotive under hood applications like charge air cooler caps.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	17000 / 12000	MPa	ISO 527
^[C] Stress at break	240 / 170	MPa	ISO 527
^[C] Strain at break	2.6 / 4	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 10000	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 6500	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	90 / 95	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	80 / 80	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	15 / 20	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	16 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	267 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	65 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	254 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	263 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	14 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	67 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn. Thickness tested	HB / *	class	IEC 60695-11-10
^[C] Burning rate, FMVSS, Thickness 1 mm	1.5 / *	mm	-
^[C] Burning rate, FMVSS, Thickness 1 mm	42	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	4.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.3 / *	%	Sim. to ISO 62
^[C] Density	1590 / -	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

Chemical Resistance

General Chemical Resistance

Applications

Automotive, Sports Equipment

Regional Availability

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