

## 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® 70G35HSLRA4 BK267 is a 35% glass fiber reinforced, heat stabilized, polyamide 66 resin for injection molding. It has excellent flow characteristics.**

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	1270	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.22	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2300	J/(kg K)	-
<sup>[C]</sup> Ejection temperature	210	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	11000 / 8000	MPa	ISO 527
<sup>[C]</sup> Stress at break	210 / 135	MPa	ISO 527
<sup>[C]</sup> Strain at break	3 / 5	%	ISO 527
<sup>[C]</sup> Tensile creep modulus, 1h	* / 7500	MPa	ISO 899-1
<sup>[C]</sup> Tensile creep modulus, 1000h	* / 5000	MPa	ISO 899-1
<sup>[C]</sup> Charpy impact strength, +23°C	80 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	80 / 80	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	13 / 16	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	10 / 10	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Puncture energy, +23°C	6 / -	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	258 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	65 / *	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	250 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	255 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	255 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	22 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	69 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
<sup>[C]</sup> Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.7 / *	mm	-
<sup>[C]</sup> Burning rate, FMVSS, Thickness 1 mm	40	mm/min	ISO 3795 (FMVSS 302)
<sup>[C]</sup> Oxygen index	21 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	1E13 / 1E9	Ohm*m	IEC 62631-3-1

[C] Surface resistivity	<b>* / 1E13</b>	Ohm	IEC 62631-3-2
[C] Electric strength	<b>37 / 24</b>	kV/mm	IEC 60243-1
[C] Comparative tracking index	<b>450 / -</b>	-	IEC 60112

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
[C] Water absorption	<b>5.5 / *</b>	%	Sim. to ISO 62
[C] Humidity absorption	<b>1.7 / *</b>	%	Sim. to ISO 62
[C] Density	<b>1410 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

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

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Additives**

Lubricants, Release agent

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

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