

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® 73G45 BK263 is a 45% glass fiber reinforced, black polyamide 6 resin for injection molding.

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] Density of melt	1330	kg/m ³	-
^[C] Thermal conductivity of melt	0.26	W/(m K)	-
^[C] Spec. heat capacity of melt	2100	J/(kg K)	-
^[C] Ejection temperature	210	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	14200 / 9000	MPa	ISO 527
^[C] Stress at break	215 / 145	MPa	ISO 527
^[C] Strain at break	3 / 5	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 9400	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 7300	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	100 / 100	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	19 / 24	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	221 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	55 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	218 / *	°C	ISO 75-1/-2
^[C] Burning rate, FMVSS, Thickness 1 mm	44	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	500 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	4.9 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.7 / *	%	Sim. to ISO 62
^[C] Density	1510 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	150 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets, Black

Regional Availability

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