

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® BM70G20HSLX BK537 is a 20% glass fiber reinforced polyamide 66 for blow molding.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
^[C] Density of melt	1070	kg/m ³	-
^[C] Thermal conductivity of melt	0.2	W/(m K)	-
^[C] Spec. heat capacity of melt	2000	J/(kg K)	-
^[C] Ejection temperature	210	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	6500 / 4000	MPa	ISO 527
^[C] Stress at break	120 / 75	MPa	ISO 527
^[C] Strain at break	4 / 13	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 3900	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 3200	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	80 / 80	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	40 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	15 / 16	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8 / 6	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	260 / *	°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	239 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	257 / *	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	5.2 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.6 / *	%	Sim. to ISO 62
^[C] Density	1250 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	155 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Blow Molding

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets, Black

Regional Availability

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