

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® 73G40T BK416 is a 40% Glass Reinforced, Heat stabilized, Toughened, Polyamide 6 for injection molding

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2 / *	%	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	13000 / 8000	MPa	ISO 527
^[C] Stress at break	210 / 150	MPa	ISO 527
^[C] Strain at break	3.8 / 7	%	ISO 527
^[C] Charpy impact strength, +23°C	100 / 110	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	80 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	19 / 23	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	14 / 14	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	220 / *	°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	215 / *	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	5.3 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.7 / *	%	Sim. to ISO 62
^[C] Density	1440 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	130 / *	cm ³ /g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Delivery form

Black

Regional Availability

Europe