Zytel® FN727 NC010A

PA6... Celanese

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® FN727 NC010A is an impact modified, plasticizer free, very flexible polyamide 6 alloy resin having good low temperature toughness, good heat aging and good chemical resistance. Uses include cable jacketing, hose and tube applications.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.8 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.2 / ***	%	ISO 294-4, 2577
[C] Density of melt	**870**	kg/m³	-
[C] Thermal conductivity of melt	**0.16**	W/(m K)	-
[C] Spec. heat capacity of melt	**2700**	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**900 / 330**	MPa	ISO 527
[C] Stress at 50% strain	**28 / 16**	MPa	ISO 527
[C] Strain at break	**>50 / >50**	%	ISO 527
[C] Charpy notched impact strength, +23°C	**130 / -**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**65 / -**	kJ/m²	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	**60 / ***	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**48 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**55 / ***	°C	ISO 75-1/-2
[C] Burning rate, FMVSS, Thickness 1 mm	**27**	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Humidity absorption	**1.4 / ***	%	Sim. to ISO 62
[C] Density	**1020 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Film Extrusion, Pipe/Tube Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Coating

Delivery form
Pellets, Natural Color

Chemical Resistance
General Chemical Resistance

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

Special Characteristics

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