Minlon® 73M40 NC010

PA6-MD40 Celanese

Product Texts

Common features of Minlon® nylon resin include mechanical and physical properties such as high mechanical strength, excellent balance of stiffness /toughness, good high temperature performance, good chemical resistance, paintability, dimensional stability and low warpage.
Grades with improved electrical and flammability properties are available within the Zytel® nylon resin product line. In addition, Minlon® nylon resin is available in different modified and reinforced grades to create a wide range of products with tailored properties for specific processes and end-uses.

The good melt stability of Minlon® 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.

Minlon® nylon resin typically is used in demanding applications in the automotive, electrical, electronic, domestic appliances and construction industries.

Minlon® 73M40 NC010 is a 40% mineral reinforced, heat stabilized polyamide 6 resin for injection molding. It has isotropic properties and low warpage.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.8 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.8 / ***	%	ISO 294-4, 2577
[C] Density of melt	**1280**	kg/m³	-
[C] Thermal conductivity of melt	**0.27**	W/(m K)	-
[C] Spec. heat capacity of melt	**1940**	J/(kg K)	-
[C] Ejection temperature	**210**	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**6000 / 2200**	MPa	ISO 527
[C] Stress at break	**87 / 59**	MPa	ISO 527
[C] Strain at break	**10 / 25**	%	ISO 527
[C] Tensile creep modulus, 1h	*** / 1400**	MPa	ISO 899-1
[C] Tensile creep modulus, 1000h	*** / 850**	MPa	ISO 899-1
[C] Charpy impact strength, +23°C	**130 / N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**95 / 95**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**5.5 / 8**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**4 / 5**	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	**70 / ***	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**110 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**196 / ***	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**210 / ***	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**65 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**75 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-
Yellow Card available	**yes / ***	-	-

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**5.4 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.8 / ***	%	Sim. to ISO 62
[C] Density	**1450 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Viscosity number	**145 / ***	cm³/g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Pellets, Natural Color

Additives
Release agent

Special Characteristics
Platable, Heat stabilized or stable to heat

Features
Low Warpage