

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® 73M30 NC010 is a 30% 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	0.9 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	4800 / 1700	MPa	ISO 527
^[C] Stress at break	82 / 55	MPa	ISO 527
^[C] Strain at break	15 / 40	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 1180	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 740	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	110 / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	85 / 85	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	5.5 / 11	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	3.5 / 3.5	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	70 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	80 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	195 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	210 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	63 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	65 / *	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	6.3 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.1 / *	%	Sim. to ISO 62
^[C] Density	1350 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	145 / *	cm ³ /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