

Product Texts

Zytel® LCPA long chain polyamide resins provide an innovative and growing portfolio of flexible polymers with excellent thermal, chemical, and hydrolysis resistance. The diverse selection of Zytel® LCPA grades is targeted for a range of performance characteristics, balancing temperature resistance, flexibility and low permeation.

Zytel® 151 NC010 is a low viscosity polyamide 612 resin.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.3 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.4 / *	%	ISO 294-4, 2577
^[C] Density of melt	900	kg/m ³	-
^[C] Thermal conductivity of melt	0.18	W/(m K)	-
^[C] Spec. heat capacity of melt	2750	J/(kg K)	-
^[C] Eff. thermal diffusivity	7.5E-8	m ² /s	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2400 / 1700	MPa	ISO 527
^[C] Yield stress	62 / 54	MPa	ISO 527
^[C] Yield strain	4.5 / 18	%	ISO 527
^[C] Nominal strain at break	17 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / 40	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	3.5 / 4	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	3.5 / 3	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	218 / *	°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	62 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	135 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	181 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	110 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	120 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Oxygen index	27 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 62631-3-1
^[C] Electric strength	30 / 30	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	3 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.3 / *	%	Sim. to ISO 62

Zytel® 151 NC010

PA612

Celanese

^[C] Density	1060 / -	kg/m ³	ISO 1183
^[C] : CAMPUS			

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Viscosity number	95 / *	cm ³ /g	ISO 307, 1157, 1628
^[C] : CAMPUS			

Characteristics**Processing**

Injection Molding, Profile Extrusion, Other Extrusion

Regional Availability

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

Delivery form

Pellets, Natural Color

Other text information**Other extrusion****Melt Viscosity**

@235°C, 1000s-1 = 70 Pa.s

Profile extrusion**Melt Viscosity**

@235°C, 1000s-1 = 70 Pa.s