

Zytel® LC6601 NC010

LONG CHAIN POLYAMIDE RESIN

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® LC6601 NC010 is a toughened, polyamide 612 resin plasticized for improved flexibility in extrusion applications.

Product information

Resin Identification	PA612-IP	ISO 1043
Part Marking Code	>PA612-IP<	ISO 11469
ISO designation	ISO 16396-PA612-I,,M1G1HN,S18-007	

Typical mechanical properties

	dry/cond.		
Tensile modulus	880 /-	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	32 /-	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	25 /-	%	ISO 527-1/-2
Nominal strain at break	>50 /-	%	ISO 527-1/-2
Tensile strain at break, 50mm/min	250 /-	%	ISO 527-1/-2
Flexural modulus	800 /-	MPa	ISO 178
Charpy impact strength, 23°C	N /-	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	70 /-	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	16 /-	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -40°C	16 /-	kJ/m ²	ISO 179/1eA
Poisson's ratio	0.45 /-		

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	215 /*	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	45 /*	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	120 /*	°C	ISO 75-1/-2

Flammability

FMVSS Class	B	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<80 mm/min	ISO 3795 (FMVSS 302)

Physical/Other properties

	dry/cond.		
Density	1020 /-	kg/m ³	ISO 1183

Extrusion

Drying Temperature	75 - 80 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.06 %
Melt Temperature Optimum	240 °C
Melt Temperature Range	230 - 245 °C

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Characteristics

Processing	Injection Moulding, Film Extrusion, Extrusion, Sheet Extrusion, Other Extrusion
Delivery form	Pellets

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
General Motors	GMW17604P-PA612	Natural