

# Zytel® LC7601 BK010 (PRELIMINARY)

## 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® LC7601 BK010 is a flexible, toughened, plasticized black polyamide resin for extrusion. It has low moisture absorption, excellent chemical resistance and good heat resistance.

### Product information

Resin Identification	PA-IP	ISO 1043
Part Marking Code	>PA-IP<	ISO 11469
ISO designation	ISO 16396-PA-IP,,ECG1H,S10-005	

### Rheological properties

	dry/cond.		
Moulding shrinkage, parallel	2.1 / -	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.3 / -	%	ISO 294-4, 2577
Melt viscosity, @ 1000 sec <sup>-1</sup> , 250 °C	150 / *	Pa.s	ISO 11443

### Typical mechanical properties

	dry/cond.		
Tensile modulus	500 / -	MPa	ISO 527-1/-2
Flexural modulus	500 / -	MPa	ISO 178
Charpy impact strength, 23 °C	N / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30 °C	N / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23 °C	115 / - <sup>[P]</sup>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -40 °C	13 / -	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23 °C	92 / -	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -40 °C	13.0 / -	kJ/m <sup>2</sup>	ISO 180/1A
Poisson's ratio	0.47 / -		

[P]: Partial Break

### Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	209 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10 °C/min	50 / 40	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	43 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	69 / *	°C	ISO 75-1/-2
Thermal conductivity of melt	0.17 <sup>[DS]</sup>	W/(m K)	ISO 22007-2
Specific heat capacity of melt	2700 <sup>[DS]</sup>	J/(kg K)	ISO 22007-4

[DS]: Derived from similar grade

### Flammability

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

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### Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	0.8/*	%	Sim. to ISO 62
Density	1030/-	kg/m <sup>3</sup>	ISO 1183

### Extrusion

Drying Temperature	75 - 80 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.06 %
Melt Temperature Optimum	225 °C
Melt Temperature Range	220 - 230 °C

### Characteristics

Processing	Film Extrusion, Extrusion, Sheet Extrusion, Other Extrusion, Coatable, Casting
Delivery form	Pellets
Additives	Plasticiser
Special characteristics	High impact or impact modified, Light stabilised or stable to light, Heat stabilised or stable to heat

### Automotive

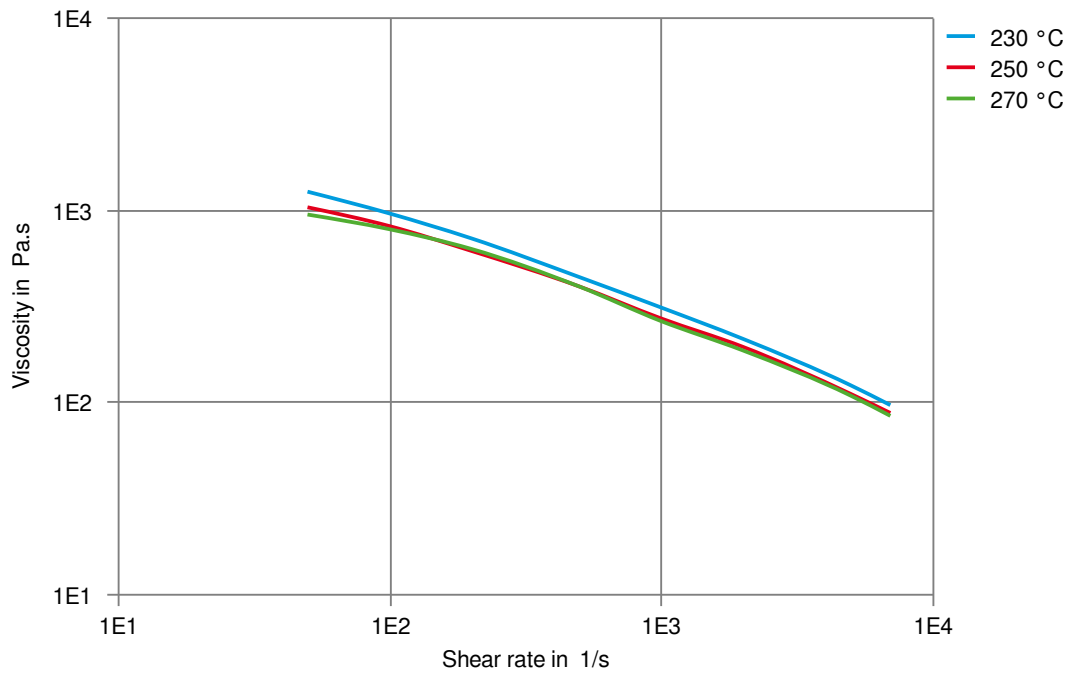
OEM  
Renault-Nissan

ADDITIONAL INFORMATION  
UB16c, No Spec, Special Part Approval, See  
Your CE Account Manager.

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## LONG CHAIN POLYAMIDE RESIN

### Viscosity-shear rate



# Zytel® LC7601 BK010 (PRELIMINARY)

## LONG CHAIN POLYAMIDE RESIN

### Shearstress-shear rate

