

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-1, 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 ²	ISO 179/1eU
Charpy impact strength, -30 °C	N / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	120 / - ^[P]	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -40 °C	13 / -	kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23 °C	92 / -	kJ/m ²	ISO 180/1A
Izod notched impact strength, -40 °C	13 / -	kJ/m ²	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
Temp. of deflection under load, 1.8 MPa	43 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	69 / *	°C	ISO 75-1/-2
Thermal conductivity of melt	0.17 ^[DS]	W/(m K)	Internal
Spec. heat capacity of melt	2700 ^[DS]	J/(kg K)	Internal

[DS]: Derived from similar grade



Zytel® LC7601 BK010 (PRELIMINARY)

LONG CHAIN POLYAMIDE RESIN

Flammability

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

Other properties

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

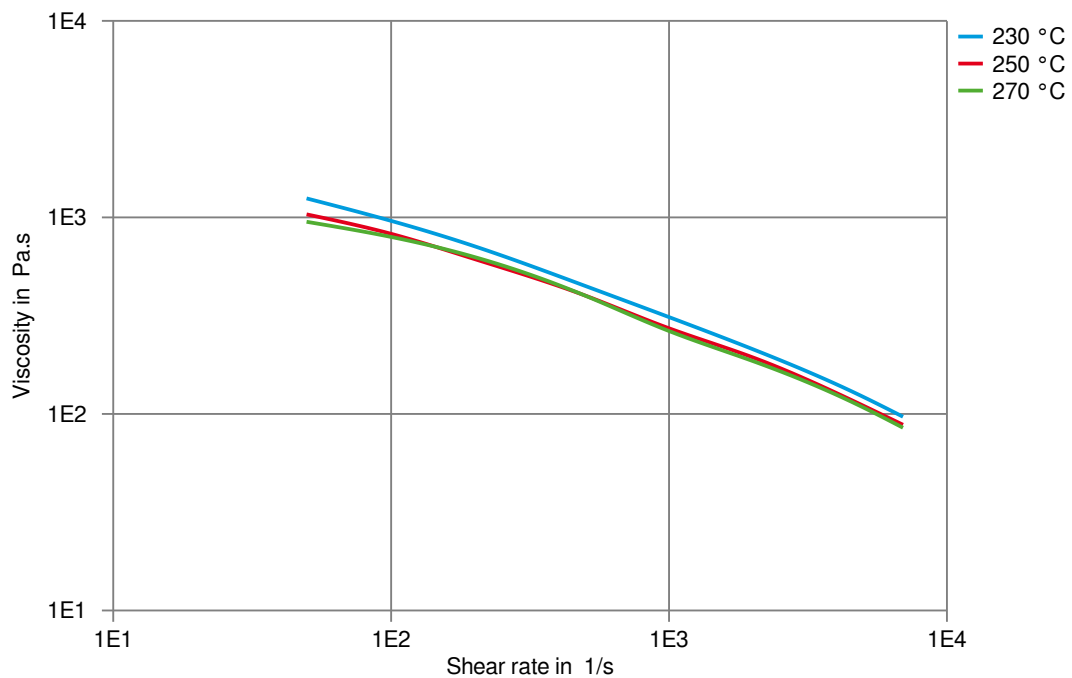
Additives	Plasticiser
-----------	-------------



Zytel® LC7601 BK010 (PRELIMINARY)

LONG CHAIN POLYAMIDE RESIN

Viscosity-shear rate



Zytel® LC7601 BK010 (PRELIMINARY)

LONG CHAIN POLYAMIDE RESIN

Shearstress-shear rate

