

Zytel® RS LC2600 BK043A

LONG CHAIN POLYAMIDE RESIN

Zytel® RS LC2600 BK043A is an unreinforced, plasticized, high viscosity, biobased long chain polyamide resin developed for air brake tubes and fluid handling applications.

Product information

Resin Identification	PA-IP	ISO 1043
Part Marking Code	>PA-IP<	ISO 11469
ISO designation	ISO 16396-PA-IP,,M1CG1H,S14-010	

Typical mechanical properties

	dry/cond.		
Tensile modulus	1150 / 660	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	37 / 36	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	19 / 30	%	ISO 527-1/-2
Tensile stress at break, 50mm/min	36 / 30	MPa	ISO 527-1/-2
Nominal strain at break	>50 ^[1] / >50 ^[2]	%	ISO 527-1/-2
Flexural modulus	900 / 470	MPa	ISO 178
Flexural stress at 3.5%	35 / 18	MPa	ISO 178
Charpy impact strength, 23°C	N / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	65 ^[3] / -	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	11 / -	kJ/m ²	ISO 179/1eA
Poisson's ratio	0.44 / 0.46		

[1]: 290%

[2]: 330%

[3]: Partial break

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	40 / 30	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	43 / *	°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.		
Humidity absorption, 2mm	1 / *	%	Sim. to ISO 62
Density	1050 / -	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

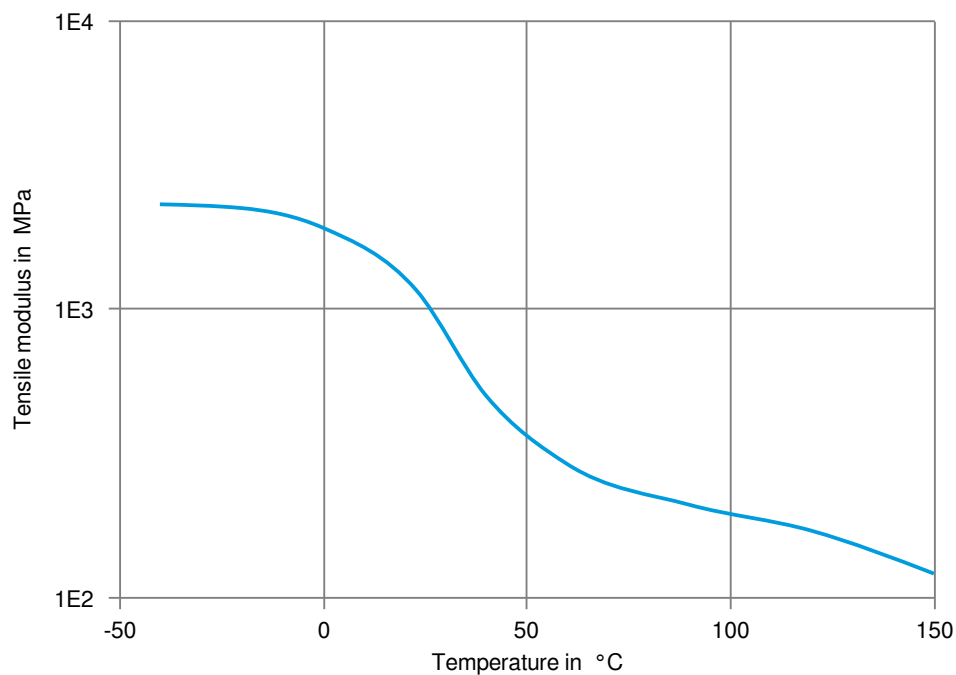
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Characteristics

Processing	Injection Moulding, Extrusion, Other Extrusion
Delivery form	Pellets
Additives	Plasticiser
Special characteristics	Heat stabilised or stable to heat
Sustainability	Bio-Content

Tensile modulus-temperature (dry)



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Tensile modulus-temperature (cond.)

