

# 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 <sup>[1]</sup> / <sup>[2]</sup> >50 <sup>[2]</sup>	%	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 <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	65 <sup>[3]</sup> /-	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	11/-	kJ/m <sup>2</sup>	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 <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	240 °C
Melt Temperature Range	230 - 245 °C

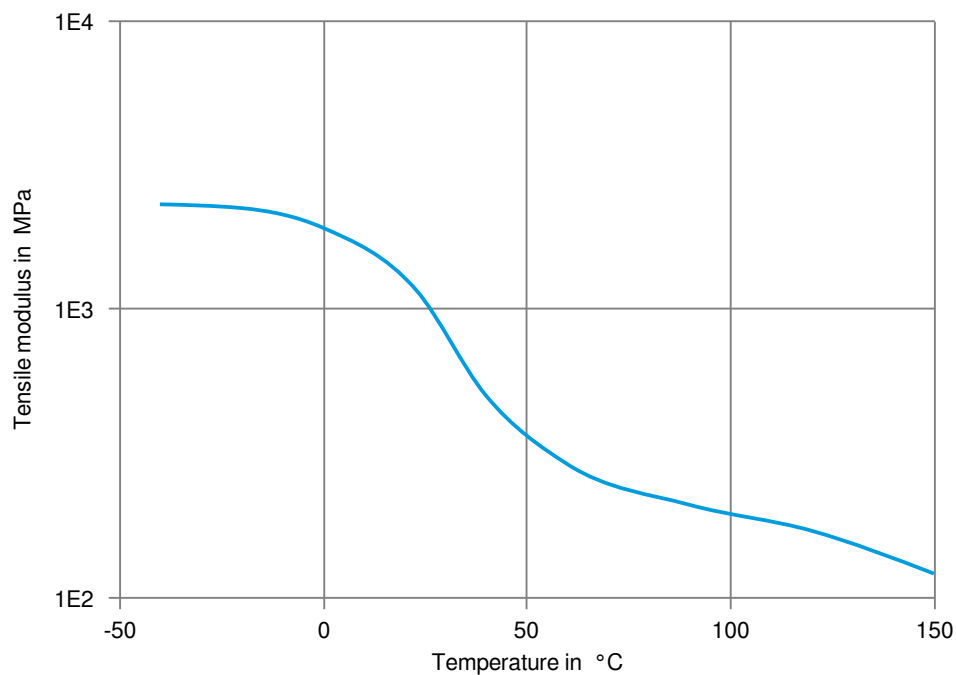
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### Characteristics

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

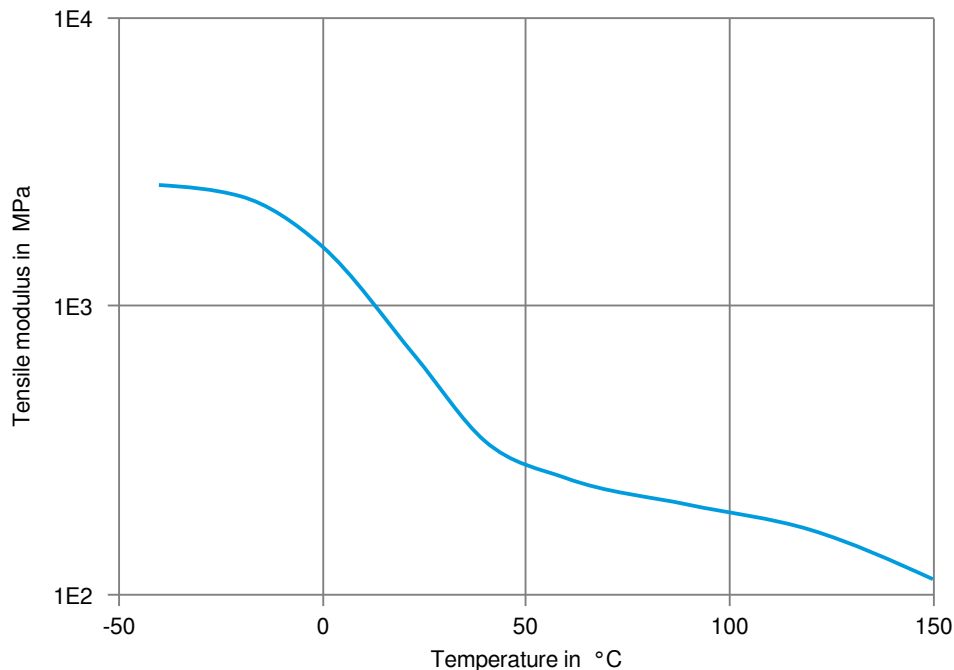
### Tensile modulus-temperature (dry)



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### Tensile modulus-temperature (cond.)



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