

# Zytel® 7301L ECO-R 331 BK300

## NYLON RESIN

Zytel® 7301L ECO-R 331 BK300 is an Unreinforced Polyamide 6

Zytel® 7301L ECO-R 331 BK300 incorporates a minimum of 30% ocean-bound post-consumer recycled content by weight in the finished product. The recycled content source is from used fishnets.

### Product information

Resin Identification	PA6	ISO 1043
Part Marking Code	>PA6<	ISO 11469

### Rheological properties

	dry/cond.		
Moulding shrinkage, parallel	1.1 / -	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.5 / -	%	ISO 294-4, 2577

### Typical mechanical properties

	dry/cond.		
Tensile modulus	3000 / 1400	MPa	ISO 527-1/-2
Tensile stress at break, 50mm/min	65 / 45	MPa	ISO 527-1/-2
Tensile strain at break, 50mm/min	36 / >50	%	ISO 527-1/-2
Flexural modulus	2900 / 1200	MPa	ISO 178
Flexural strength	99 / 40	MPa	ISO 178
Charpy notched impact strength, 23°C	4.6 / 16	kJ/m <sup>2</sup>	ISO 179/1eA
Poisson's ratio	0.37 / 0.43		

### Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	60 / *	°C	ISO 75-1/-2

### Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.8 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.2 / *	%	Sim. to ISO 62
Density	1130 / -	kg/m <sup>3</sup>	ISO 1183

### Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	270 °C
Min. melt temperature	260 °C
Max. melt temperature	280 °C
Mold Temperature Optimum	70 °C
Min. mould temperature	50 °C
Max. mould temperature	90 °C

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### Characteristics

Processing	Injection Moulding
Delivery form	Pellets

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