

ZYTEL® 73G20UV ECO-R 311 BLK1LM (DEVELOPMENTAL) NYLON RESIN

Zytel® 73G20UV ECO-R 311 BLK1LM incorporates 30% of post-industrial recycled content by weight in the finished product. It is a 20% Glass Reinforced, UV Stabilized and Laser-markable Polyamide 6.

Product information

Resin Identification	PA6-GF20	ISO 1043
Part Marking Code	>PA6-GF20<	ISO 11469
Continuous Service Temperature	90 °C	IEC 60216-1

Rheological properties

	dry/cond.		
Melt volume-flow rate	20 / *	cm ³ /10min	ISO 1133
Temperature	230 / *	°C	
Load	5 / *	kg	
Viscosity number	140 / *	cm ³ /g	ISO 307, 1628

Typical mechanical properties

	dry/cond.		
Tensile modulus	7100 / -	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	130 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	40 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	5 / -	kJ/m ²	ISO 179/1eA
Poisson's ratio	0.35 / - ^[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	225 / *	°C	ISO 11357-1/-3

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.6 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.9 / *	%	Sim. to ISO 62
Density	1280 / -	kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.15 %
Melt Temperature Optimum	250 °C
Min. melt temperature	235 °C
Max. melt temperature	280 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	80 °C
Min. mould temperature	60 °C
Max. mould temperature	120 °C

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Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	U.V. stabilised or stable to weather, Laser Markable
Sustainability	Recycled Content

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
VW Group	VW 50125	*Best Fitting Grade To PA6-5, Not Officially Approved

The above data are for the developmental sample and are subject to change as the product is scaled up.

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