

CELANYL® B3 HH GF16 BK 9005/UV/2A

CELANYL®

Designed for automotive industry, suitable for any technical application requiring higher strength, UV and long term heat ageing resistance.

Product information

Resin Identification	PA6-GF16	ISO 1043
Part Marking Code	>PA6-GF16<	ISO 11469
Continuous Service Temperature	120 °C	IEC 60216-1

Rheological properties

Moulding shrinkage range, parallel	0.4 - 0.7 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.7 - 1 %	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	6300/-	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	125/-	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.7/-	%	ISO 527-1/-2
Flexural modulus	5600/-	MPa	ISO 178
Flexural strength	150/-	MPa	ISO 178
Charpy impact strength, 23°C	40/-	kJ/m ²	ISO 179/1eU
Izod notched impact strength, 23°C	5/-	kJ/m ²	ISO 180/1A
Poisson's ratio	0.35/- ^[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Temperature of deflection under load, 1.8 MPa	195/*	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	210/*	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB/*	class	IEC 60695-11-10
Thickness tested	0.8/*	mm	IEC 60695-11-10

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	2.2/*	%	Sim. to ISO 62
Water absorption, 2mm	7.6/*	%	Sim. to ISO 62
Density	1240/-	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	260 °C
Min. melt temperature	240 °C
Max. melt temperature	290 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	80 °C

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Min. mould temperature	60 °C
Max. mould temperature	120 °C

Characteristics

Processing	Injection Moulding
Delivery form	Granules
Special characteristics	U.V. stabilised or stable to weather, Heat stabilised or stable to heat