Celanese
The chemistry inside innovation™

CELANYL® B3 HH GF16 BK 9005/UV/2A

CELANYL®

Designed for automotive industry, suitable for any technical application requiring higher strenght, 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/m²	ISO 179/1eU
Izod notched impact strength, 23°C	5 / -	kJ/m²	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/m³	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