

CELANYL® B2 HH GF50 BK 9005/2

CELANYL®

Designed for Automotive and other technical applications that require high mechanical performances and long term heat ageing resistance combined with easy processability and good surface quality.

Product information

Resin Identification	PA6-GF50	ISO 1043
Part Marking Code	>PA6-GF50<	ISO 11469
Continuous Service Temperature	130 °C	IEC 60216-1

Rheological properties

	dry/cond.		
Moulding shrinkage, parallel	0.4 / -	%	ISO 294-4, 2577
Moulding shrinkage range, parallel	0.2 - 0.6	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.6 - 0.9	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	16000 / 12000	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	220 / 150	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.5 / 4	%	ISO 527-1/-2
Flexural modulus	15000 / -	MPa	ISO 178
Flexural strength	320 / -	MPa	ISO 178
Charpy impact strength, 23°C	100 / -	kJ/m ²	ISO 179/1eU
Izod notched impact strength, 23°C	16 / -	kJ/m ²	ISO 180/1A
Poisson's ratio	0.33 / 0.33 ^[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	225 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	213 / *	°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	1.2 / *	%	Sim. to ISO 62
Water absorption, 2mm	4.2 / *	%	Sim. to ISO 62
Density	1560 / -	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

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Mold Temperature Optimum	80 °C
Min. mould temperature	60 °C
Max. mould temperature	120 °C

Characteristics

Processing	Injection Moulding
Delivery form	Granules
Special characteristics	Heat stabilised or stable to heat, High Flow