

# CELANYL® B2 HH GF50 BK 9005/3

## 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

Moulding shrinkage range, parallel	0.2 - 0.5 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.5 - 0.8 %	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	15500 / -	MPa	ISO 178
Flexural strength	340 / -	MPa	ISO 178
Charpy impact strength, 23°C	100 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Izod notched impact strength, 23°C	18 / -	kJ/m <sup>2</sup>	ISO 180/1A
Poisson's ratio	0.33 / 0.33 <sup>[C]</sup>		
[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	210 / *	°C	ISO 75-1/-2

### Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB / *	class	IEC 60695-11-10

### Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.3 / *	%	Sim. to ISO 62
Water absorption, 2mm	4.7 / *	%	Sim. to ISO 62
Density	1580 / -	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	≤0.15 %
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
Min. mould temperature	60 °C

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Max. mould temperature 120 °C

### Characteristics

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

### Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
VW Group	VW 50125	*Best Fitting Grade To PA6-10, Not Officially Approved