

CELANYL® B2 GF50 BK 9005

CELANYL®

*Designed for Automotive industry, suitable for other technical applications that require high stiffness and impact resistance.
Long term heat ageing resistance, excellent 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	215 / 140	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.3 / 4	%	ISO 527-1/-2
Flexural modulus	14500 / -	MPa	ISO 178
Flexural strength	320 / -	MPa	ISO 178
Charpy impact strength, 23 °C	38 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	15.5 / 20	kJ/m ²	ISO 179/1eA
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.		
Temperature of deflection under load, 1.8 MPa	214 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	220 / *	°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	4.3 / *	%	Sim. to ISO 62
Density	1550 / -	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	Heat stabilised or stable to heat, Specialty appearance, High Flow

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Stellantis	MS.50017 / PA6.GF50.14100F.15I.HS	CPN3504 BLACK;ASTM D6779PA022G50Z1
Stellantis - Chrysler	MS.50017 / CPN-3504	Black;ASTM D6779PA022G50Z1
VW Group	VW 50134	*Best Fitting Grade To PA6-10-A, Not Officially Approved