

CELANYL® B3 W GF45 BK 9005/2

CELANYL®

General purpose grade, high stiffness, good surface quality.

Product information

Resin Identification	PA6-GF45	ISO 1043
Part Marking Code	>PA6-GF45<	ISO 11469
Continuous Service Temperature	110 °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	14500/-	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	208/-	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.8/-	%	ISO 527-1/-2
Flexural modulus	13200/-	MPa	ISO 178
Flexural strength	300/-	MPa	ISO 178
Charpy impact strength, 23°C	96/-	kJ/m ²	ISO 179/1eU
Izod notched impact strength, 23°C	15/-	kJ/m ²	ISO 180/1A
Poisson's ratio	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	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	1.4/*	%	Sim. to ISO 62
Water absorption, 2mm	4.7/*	%	Sim. to ISO 62
Density	1500/-	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
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