Celanese
The chemistry inside innovation™

CELANYL® B3 HH GF30 BK 9005/2

CELANYL®

Suitable for any technical application requiring medium term heat ageing resistance.

Product information

Resin Identification	PA6-GF30		ISO 1043
Part Marking Code	>PA6-GF30<		ISO 11469
Continuous Service Temperature	120	°C	IEC 60216-1

Rheological properties

Moulding shrinkage range, parallel	0.3 - 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	9400 / 5400	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	165 / 90	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3 / 7.5	%	ISO 527-1/-2
Flexural modulus	8500 / -	MPa	ISO 178
Flexural strength	240 / -	MPa	ISO 178
Charpy impact strength, 23°C	75 / 80	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	11 / -	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	12 / 18	kJ/m²	ISO 180/1A
Izod impact strength, 23°C	65 / -	kJ/m²	ISO 180/1U
Poisson's ratio	0.39 / -[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	205 / *	°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
Burning rate, Thickness 1 mm	47.6	mm/min	ISO 3795 (FMVSS 302)

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.8 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.1 / *	%	Sim. to ISO 62
Density	1360 / -	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

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Screw tangential speed	≤0.2	m/s
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