Celanese
The chemistry inside innovation™

CELANYL® B3 HH GF50 NC 1102/2

CELANYL®

Designed for demanding application, excellent mechanical performances, suitable for E&E parts.

Product information

Resin Identification	PA6-GF50		ISO 1043
Part Marking Code	>PA6-GF50<		ISO 11469
Continuous Service Temperature	120	°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 / -	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	215 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3 / -	%	ISO 527-1/-2
Flexural modulus	15500 / -	MPa	ISO 178
Charpy impact strength, 23°C	95 / -	kJ/m²	ISO 179/1eU
Izod notched impact strength, 23°C	20 / -	kJ/m²	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

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/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
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