Celanese
The chemistry inside innovation™

CELANYL® A4 HH GF50 NC 1102

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Product information

Resin Identification	PA66-GF50		ISO 1043
Part Marking Code	>PA66-GF50<		ISO 11469
Continuous Service Temperature	130	°C	IEC 60216-1

Rheological properties

Moulding shrinkage range, parallel	0.1 - 0.3	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.3 - 0.6	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	16000 / -	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	210 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2 / -	%	ISO 527-1/-2
Flexural modulus	15000 / -	MPa	ISO 178
Flexural strength	340 / -	MPa	ISO 178
Izod notched impact strength, 23°C	15 / -	kJ/m²	ISO 180/1A
Izod impact strength, 23°C	75 / -	kJ/m²	ISO 180/1U
Poisson's ratio	0.33 / -[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	255 / *	°C	ISO 75-1/-2

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.2 / *	%	Sim. to ISO 62
Water absorption, 2mm	4.3 / *	%	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	295	°C
Min. melt temperature	285	°C
Max. melt temperature	305	°C
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	70	°C
Max. mould temperature	120	°C

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Characteristics

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

Revised: 2024-08-16 Source: Celanese Materials Database