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	266	°F	IEC 60216-1

Rheological properties

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

Typical mechanical properties

	dry/cond.		
Tensile modulus	2.32E6 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	30500 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2 / -	%	ISO 527-1/-2
Flexural modulus	2.18E6 / -	psi	ISO 178
Flexural strength	49300 / -	psi	ISO 178
Izod notched impact strength, 23°C	7.14 / -	ftlb/in²	ISO 180/1A
Izod impact strength, 23°C	35.7 / -	ftlb/in²	ISO 180/1U

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	500 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	491 / *	°F	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	0.0563 / -	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	176	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.15	%
Melt Temperature Optimum	563	°F
Min. melt temperature	545	°F
Max. melt temperature	581	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	212	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F

Characteristics

Processing	Injection Molding, Extrusion
Special characteristics	Heat stabilized or stable to heat

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

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