CELANYL® A3 GF50 NC 1102/J

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Car industry, Household appliances, Electrical devices.

Product information

Resin Identification	PA66-GF50	ISO 1043
Part Marking Code	>PA66-GF50<	ISO 11469

Rheological properties

Molding shrinkage range, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.5 - 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	33400 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.2 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	45.2 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	7.14 / -	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	7.61 / -	ftlb/in²	ISO 180/1A
Izod impact strength, 23°C	38.1 / -	ftlb/in²	ISO 180/1U

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	495 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	504 / *	°F	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.0315 / *	in	IEC 60695-11-10
UL recognition	yes / *		UL 94

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	0.9 / *	%	Sim. to ISO 62
Water absorption, 2mm	4 / *	%	Sim. to ISO 62

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

Revised: 2025-02-14 Source: Celanese Materials Database

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Characteristics

Processing	Injection Molding

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