Celanese
The chemistry inside innovation™

CELANYL® A3 GF50 NC 1102/J

CELANYL®

Car industry, Household appliances, Electrical devices.

Product information

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

Rheological properties

Moulding shrinkage range, parallel	0.3	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.5 - 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	230 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.2 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	95 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	15 / -	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	16 / -	kJ/m²	ISO 180/1A
Izod impact strength, 23°C	80 / -	kJ/m²	ISO 180/1U
Poisson's ratio	0.33 / -[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	265 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	257 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	262 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	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	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

Celanese
The chemistry inside innovation™

CELANYL® A3 GF50 NC 1102/J

CELANYL®

Max. mould temperature	120 °C

Characteristics

Processing	Injection Moulding
Delivery form	Granules

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