Celanese
The chemistry inside innovation™

CELANYL® A3 J10 BK 9005/E

CELANYL®

General purpose grade, suitable for any technical applications requiring good impact resistance and flexibility even at low temperature.

Product information

Resin Identification	PA66-I		ISO 1043
Part Marking Code	>PA66-I<		ISO 11469
Continuous Service Temperature	85	°C	IEC 60216-1

Rheological properties

Moulding shrinkage range, parallel	1.2 - 1.6	%	ISO 294-4, 2577
Moulding shrinkage range, normal	1.2 - 1.6	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	2400 / -	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	62 / -	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	5 / -	%	ISO 527-1/-2
Tensile strain at break, 50mm/min	20 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	N / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	18 / -	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	16 / -	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C	10.0 / -	kJ/m²	ISO 180/1A
Poisson's ratio	0.38 / -[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	65 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	200 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB / *	class	IEC 60695-11-10

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	2.1 / *	%	Sim. to ISO 62
Water absorption, 2mm	7.6 / *	%	Sim. to ISO 62
Density	1090 / -	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	290	°C
Min. melt temperature	280	°C
Max. melt temperature	300	°C
Screw tangential speed	≤0.3	m/s

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Mold Temperature Optimum	80 °C
Min. mould temperature	50 °C
Max. mould temperature	100 °C

Characteristics

Processing	Injection Moulding
Delivery form	Granules
Special characteristics	High impact or impact modified

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