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	185	°F	IEC 60216-1

Rheological properties

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

Typical mechanical properties

	dry/cond.		
Tensile modulus	348000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	9000 / -	psi	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 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	8.56 / -	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	7.61 / -	ftlb/in²	ISO 180/1A
Izod notched impact strength, -30°C	4.76 / -	ftlb/in²	ISO 180/1A

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	149 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	392 / *	°F	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	0.0393 / -	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	554	°F
Min. melt temperature	536	°F
Max. melt temperature	572	°F
Max. screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	176	°F
Min. mold temperature	122	°F

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

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Max. mold temperature	212 °F

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified

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