CELANYL® B3 J20 NC 1102

CELANYL®

Designed for any technical application requiring good flexibility and high toughness even at low temperature.

Product information

Resin Identification	PA6-I		ISO 1043
Part Marking Code	>PA6-I<		ISO 11469
Continuous Service Temperature	194	°F	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	3880 / *	in³/lb	ISO 307, 1628
Molding shrinkage range, parallel	1.5 - 2	%	ISO 294-4, 2577
Molding shrinkage range, normal	1.5 - 2	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	232000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	5800 / -	psi	ISO 527-1/-2
Charpy impact strength, 23 °C	N / -	ftlb/in²	ISO 179/1eU
Charpy impact strength, -30 °C	N / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23 °C	N / -	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30 °C	11.9 / -	ftlb/in²	ISO 179/1eA
Ball indentation hardness, H 961/30	11600 / -	psi	ISO 2039-1

Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	437 / *	°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	320 / *	°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	1.9 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.7 / *	%	Sim. to ISO 62
Density	0.0379 / -	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	500	°F
Min. melt temperature	464	°F
Max. melt temperature	518	°F
Max. screw tangential speed	≤0.25	m/s
Mold Temperature Optimum	158	°F
Min. mold temperature	122	°F
Max. mold temperature	194	°F

Revised: 2025-07-08 Source: Celanese Materials Database

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Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified

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