Celanese
The chemistry inside innovation™

CELANYL® B3 N BK 9005/U

CELANYL®

General purpose grade suitable for any technical application requiring easy processability and fast cycles.

Product information

Resin Identification	PA6		ISO 1043
Part Marking Code	>PA6<		ISO 11469
Continuous Service Temperature	90	°C	IEC 60216-1

Rheological properties

Moulding shrinkage range, parallel	1.4 - 1.8	%	ISO 294-4, 2577
Moulding shrinkage range, normal	1.4 - 1.8	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	3100 / 1300	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	78 / 39	MPa	ISO 527-1/-2
Tensile strain at break, 50mm/min	9 / 20	%	ISO 527-1/-2
Charpy impact strength, 23°C	45 / N	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	40 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	4 / 20	kJ/m²	ISO 179/1eA
Ball indentation hardness, H 961/30	155 / -	MPa	ISO 2039-1
Poisson's ratio	0.37 / 0.44[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	225 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	70 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	175 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB / *	class	IEC 60695-11-10
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.2 / *	mm	IEC 60695-11-10

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	2.4 / *	%	Sim. to ISO 62
Water absorption, 2mm	8.5 / *	%	Sim. to ISO 62
Density	1130 / -	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	260	°C
Min. melt temperature	235	°C
Max. melt temperature	270	°C
Screw tangential speed	≤0.3	m/s

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Mold Temperature Optimum	70	°C
Min. mould temperature	50	°C
Max. mould temperature	100	°C

Characteristics

Processing	Injection Moulding
Delivery form	Granules
Additives	Nucleated
Special characteristics	High Flow