Celanese
The chemistry inside innovation™

CELANYL® A3 H J20 NC 1102/T/01

CELANYL®

Toughened grade for outstanding impact resistance over a wide temperature range.

Product information

Resin Identification	PA66-I		ISO 1043
Part Marking Code	>PA66-I<		ISO 11469
Continuous Service Temperature	120	°C	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	145 / *	cm^3/g	ISO 307, 1628
Moulding shrinkage range, parallel	1.6 - 2	%	ISO 294-4, 2577
Moulding shrinkage range, normal	1.6 - 2	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	1880 / -	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	48 / -	MPa	ISO 527-1/-2
Tensile strain at break, 50mm/min	75 / -	%	ISO 527-1/-2
Charpy notched impact strength, 23°C	65 / -	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	24 / -	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 961/30	100 / -	MPa	ISO 2039-1
Poisson's ratio	0.41 / -[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	75 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	160 / *	°C	ISO 75-1/-2

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	31	mm/min	ISO 3795 (FMVSS 302)

Electrical properties

	dry/cond.		
Volume resistivity	1E13 / -	Ohm.m	IEC 62631-3-1
Comparative tracking index	600 / -		IEC 60112

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.7 / *	%	Sim. to ISO 62
Water absorption, 2mm	7 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m^3	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

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Min. melt temperature	280	°C
Max. melt temperature	300	°C
Screw tangential speed	≤0.3	m/s
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, Heat stabilised or stable to heat

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