

CELANYL® A3 D10 NC 1102/C

CELANYL®

Car industry, Household appliances, Electrical devices.

Product information

Resin Identification	PA66-I	ISO 1043
Part Marking Code	>PA66-I<	ISO 11469
Continuous Service Temperature	110 °C	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	140 / *	cm ³ /g	ISO 307, 1628
Moulding shrinkage range, parallel	1.8 - 2.2	%	ISO 294-4, 2577
Moulding shrinkage range, normal	1.8 - 2.2	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	2600 / -	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	70 / -	MPa	ISO 527-1/-2
Tensile strain at break, 50mm/min	33 / -	%	ISO 527-1/-2
Charpy impact strength, 23 °C	N / -	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30 °C	N / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	7.5 / -	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	5.5 / -	kJ/m ²	ISO 179/1eA
Ball indentation hardness, H 961/30	130 / -	MPa	ISO 2039-1
Poisson's ratio	0.38 / - ^[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	260 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	85 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	185 / *	°C	ISO 75-1/-2

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	1.8 / *	%	Sim. to ISO 62
Water absorption, 2mm	7.5 / *	%	Sim. to ISO 62
Density	1110 / -	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
Min. melt temperature	280 °C
Max. melt temperature	300 °C

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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
Additives	Nucleated
Special characteristics	High impact or impact modified, Heat stabilised or stable to heat, High Flow