

ISO 1043

ISO 11469

IEC 60216-1

ISO 307, 1628

ISO 294-4, 2577

ISO 294-4, 2577

ISO 527-1/-2

ISO 527-1/-2

ISO 527-1/-2

ISO 179/1eA

ISO 179/1eA

ISO 11357-1/-3

ISO 75-1/-2

ISO 75-1/-2

IEC 62631-3-1 IEC 60112

ISO 2039-1

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 >PA66-I< Part Marking Code 120 °C **Continuous Service Temperature Rheological properties** dry/cond. Viscosity number 145/*cm³/g 1.6 - 2 Moulding shrinkage range, parallel % % Moulding shrinkage range, normal 1.6 - 2 Typical mechanical properties dry/cond. **Tensile modulus** 1880/-MPa Tensile stress at yield, 50mm/min 48/-MPa 75/-Tensile strain at break, 50mm/min % Charpy notched impact strength, 23°C 65/kJ/m² Charpy notched impact strength, -30°C 24/kJ/m² Ball indentation hardness, H 961/30 100/-MPa 0.41/-^[C] Poisson's ratio [C]: Calculated Thermal properties dry/cond. Melting temperature, 10°C/min 265/* °C Temperature of deflection under load, 1.8 MPa 75/* °C Temperature of deflection under load, 0.45 MPa 160/* °C

Flammability

ISO 3795 (FMVSS 302)
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dry/cond.

dry/cond.

Electrical properties

Volume resistivity	1E13/-	Ohm.m
Comparative tracking index	600/-	

Physical/Other properties

Humidity absorption, 2mm	1.7/*	%	Sim. to ISO 62
Water absorption, 2mm	7/*	%	Sim. to ISO 62
Density	1070/-	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	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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NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication as a promise or guarantee of specific properties of our groucts. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the

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