

## CELANYL<sup>®</sup> A3 J10 BK 9005/E

CELANYL®

General purpose grade, suitable for any technical applications requiring good impact resistance and flexibility even at low temperature.

## **Product information**

| T TOQUET INTOTNATION                             |                       |                   |                 |
|--|-----------------------|-------------------|-----------------|
| Resin Identification                             | PA66-I                |                   | ISO 1043        |
| Part Marking Code                                | >PA66-I<              |                   | ISO 11469       |
| Continuous Service Temperature                   | 8                     | 5 °C              | IEC 60216-1     |
|  | -                     |                   |                 |
| Rheological properties                           |                       |                   |                 |
| Moulding shrinkage range, parallel               | 1.2 - 1.              | 6 %               | ISO 294-4, 2577 |
| Moulding shrinkage range, normal                 | 1.2 - 1.6 %           |                   | ISO 294-4, 2577 |
|  |                       |                   |                 |
| Typical mechanical properties                    | dry/cond.             |                   |                 |
| Tensile modulus                                  | 2400/-                | MPa               | ISO 527-1/-2    |
| Tensile stress at yield, 50mm/min                | 62/-                  | MPa               | ISO 527-1/-2    |
| Tensile strain at yield, 50mm/min                | 5/-                   | %                 | ISO 527-1/-2    |
| Tensile strain at break, 50mm/min                | 20/-                  | %                 | ISO 527-1/-2    |
| Charpy impact strength, 23°C                     | N/-                   | kJ/m²             | ISO 179/1eU     |
| Charpy notched impact strength, 23°C             | 18/-                  | kJ/m <sup>2</sup> | ISO 179/1eA     |
| Izod notched impact strength, 23°C               | 16/-                  | kJ/m <sup>2</sup> | ISO 180/1A      |
| Izod notched impact strength, -30 °C             | 10.0/-                | kJ/m <sup>2</sup> | ISO 180/1A      |
| Poisson's ratio                                  | 0.38/- <sup>[C]</sup> | KJ/III            | 130 T80/TA      |
|  | 0.38/-**              |                   |                 |
| [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    | 65/*                  | °Č                | ISO 75-1/-2     |
| Temperature of deflection under load, 0.45 MPa   | 200/*                 | °C                | ISO 75-1/-2     |
| remperature of deflection under load, 0.45 Mir a | 2007                  | 0                 | 130 73-17-2     |
| Flammability                                     | dry/cond.             |                   |                 |
| Burning Behav. at 1.5mm nom. thickn.             | HB/*                  | class             | IEC 60695-11-10 |
| 5  |                       |                   |                 |
| Physical/Other properties                        | dry/cond.             |                   |                 |
| Humidity absorption, 2mm                         | 2.1/*                 | %                 | Sim. to ISO 62  |
| Water absorption, 2mm                            | 7.6/*                 | %                 | Sim. to ISO 62  |
| Density  | 1090/-                | kg/m³             | ISO 1183        |
|  |                       | -                 |                 |
| Injection  |                       |                   |                 |
| Drying Recommended                               | yes                   |                   |                 |
| Drying Temperature                               | 8                     | 0 °C              |                 |
| Drying Time, Dehumidified Dryer                  | 2                     | 4 h               |                 |
| Processing Moisture Content                      | ≤0.1                  |                   |                 |
| Melt Temperature Optimum                         | 29                    |                   |                 |
| Min. melt temperature                            | 280 °C                |                   |                 |
| Max. melt temperature                            | 300 °C                |                   |                 |
| Screw tangential speed                           |                       | 3 m/s             |                 |
| colon langonila opool                            | _0.                   | 0 11/0            |                 |

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| 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 |

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