

# CELANYL<sup>®</sup> A3 H J10 GF13 NC 1102/E CELANYL®

Car industry, Household appliances, Electrical devices.

| Product information                           |                          |                   |                 |
|---|--------------------------|-------------------|-----------------|
| Resin Identification                          | PA66-I-GF13              |                   | ISO 1043        |
| Part Marking Code                             | >PA66-I-GF13<            |                   | ISO 11469       |
| Rheological properties                        | dry/cond.                |                   |                 |
| Moulding shrinkage, parallel                  | 0.6/-                    | %                 | ISO 294-4, 2577 |
| Moulding shrinkage range, parallel            | 0.4 - 0.7                | %                 | ISO 294-4, 2577 |
| Moulding shrinkage, normal                    | 0.8/-                    | %                 | ISO 294-4, 2577 |
| Moulding shrinkage range, normal              | 0.7 - 1                  | %                 | ISO 294-4, 2577 |
| Typical mechanical properties                 | dry/cond.                |                   |                 |
| Tensile modulus                               | 4900/3720                | MPa               | ISO 527-1/-2    |
| Tensile stress at break, 5mm/min              | 95/72                    | MPa               | ISO 527-1/-2    |
| Tensile strain at break, 5mm/min              | 5/8.8                    | %                 | ISO 527-1/-2    |
| Flexural modulus                              | 4100/-                   | MPa               | ISO 178         |
| Flexural strength                             | 96/-                     | MPa               | ISO 178         |
| Charpy impact strength, 23°C                  | 60/12                    | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy notched impact strength, 23°C          | 7.5/-                    | kJ/m <sup>2</sup> | ISO 179/1eA     |
| Izod notched impact strength, 23°C            | 9.5/-                    | kJ/m²             | ISO 180/1A      |
| Izod impact strength, 23°C                    | >50/-                    | kJ/m²             | ISO 180/1U      |
| Poisson's ratio                               | 0.35/0.36 <sup>[C]</sup> |                   |                 |
| [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 | 238/*                    | °C                | ISO 75-1/-2     |
| Flammability                                  | dry/cond.                |                   |                 |
| Burning Behav. at thickness h                 | HB/*                     | class             | IEC 60695-11-10 |
| Thickness tested                              | 0.8/*                    | mm                | IEC 60695-11-10 |
| Glow Wire Flammability Index, 0.75mm          | 650/-                    | °C                | IEC 60695-2-12  |
| Glow Wire Flammability Index, 3.0mm           | 650/-                    | °C                | IEC 60695-2-12  |
| Electrical properties                         | dry/cond.                |                   |                 |
| Comparative tracking index                    | 500/-                    |                   | IEC 60112       |
| Physical/Other properties                     | dry/cond.                |                   |                 |
| Humidity absorption, 2mm                      | 1/*                      | %                 | Sim. to ISO 62  |
| Water absorption, 2mm                         | 6/*                      | %                 | Sim. to ISO 62  |
| Density                                       | 1200/-                   | kg/m <sup>3</sup> | ISO 1183        |
| •   |                          | -                 |                 |





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## Injection

| Drying Recommended              | yes      |
|---------------------------------|----------|
| Drying Temperature              | 80 °C    |
| Drying Time, Dehumidified Dryer | 2-4 h    |
| Processing Moisture Content     | ≤0.15 %  |
| Melt Temperature Optimum        | 295 °C   |
| Min. melt temperature           | 285 °C   |
| Max. melt temperature           | 305 °C   |
| Screw tangential speed          | ≤0.2 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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