

# CELANYL® A3 W GF33 BK 9005/Y

## CELANYL®

General purpose grade, suitable for many technical applications. Medium term heat ageing resistance.

### Product information

|                                |                   |             |
|--------------------------------|-------------------|-------------|
| Resin Identification           | (PA66+PA6)-GF33   | ISO 1043    |
| Part Marking Code              | >(PA66+PA6)-GF33< | ISO 11469   |
| Continuous Service Temperature | 125 °C            | IEC 60216-1 |

### Rheological properties

|                                    | dry/cond. |                    |                 |
|------------------------------------|-----------|--------------------|-----------------|
| Viscosity number                   | 140 / *   | cm <sup>3</sup> /g | ISO 307, 1628   |
| Moulding shrinkage range, parallel | 0.3 - 0.6 | %                  | ISO 294-4, 2577 |
| Moulding shrinkage range, normal   | 0.6 - 0.9 | %                  | ISO 294-4, 2577 |

### Typical mechanical properties

|                                       | dry/cond.               |                   |              |
|---------------------------------------|-------------------------|-------------------|--------------|
| Tensile modulus                       | 10200 / -               | MPa               | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min      | 165 / -                 | MPa               | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min      | 2.8 / -                 | %                 | ISO 527-1/-2 |
| Charpy impact strength, 23 °C         | >50 / -                 | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength, 23 °C | 8 / -                   | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Poisson's ratio                       | 0.34 / - <sup>[C]</sup> |                   |              |

[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  | 230 / *   | °C | ISO 75-1/-2    |
| Temperature of deflection under load, 0.45 MPa | 245 / *   | °C | ISO 75-1/-2    |

### Flammability

|                                      | dry/cond. |       |                      |
|--------------------------------------|-----------|-------|----------------------|
| Burning Behav. at 1.5mm nom. thickn. | HB / *    | class | IEC 60695-11-10      |
| FMVSS Class                          | B         |       | ISO 3795 (FMVSS 302) |

### Physical/Other properties

|                          | dry/cond. |                   |                |
|--------------------------|-----------|-------------------|----------------|
| Humidity absorption, 2mm | 1.7 / *   | %                 | Sim. to ISO 62 |
| Water absorption, 2mm    | 5.6 / *   | %                 | Sim. to ISO 62 |
| Density                  | 1380 / -  | kg/m <sup>3</sup> | 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        | 295 °C   |
| Min. melt temperature           | 285 °C   |
| Max. melt temperature           | 305 °C   |
| Screw tangential speed          | ≤0.2 m/s |
| Mold Temperature Optimum        | 100 °C   |
| Min. mould temperature          | 70 °C    |

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Max. mould temperature

120 °C

### Characteristics

Processing

Injection Moulding

Delivery form

Granules

Special characteristics

Heat stabilised or stable to heat, High Flow

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Page: 2 of 2

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