

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 ³ /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 ² | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 8/- | kJ/m ² | ISO 179/1eA |
| Poisson's ratio | 0.34/- ^[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 | 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 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 | 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 |