

CELANYL® A3 H GF30 BK 9005/R

CELANYL®

General purpose grade, suitable for any technical and aesthetical use. Heat ageing resistant.

Product information

| | | |
|----------------------|-------------|-----------|
| Resin Identification | PA66-GF30 | ISO 1043 |
| Part Marking Code | >PA66-GF30< | ISO 11469 |

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 | 10000 / - | MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 170 / - | MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 2.8 / - | % | ISO 527-1/-2 |
| Flexural strength | 260 / - | MPa | ISO 178 |
| Charpy impact strength, 23 °C | >50 / - | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, 23 °C | 7 / - | kJ/m ² | ISO 179/1eA |
| Poisson's ratio | 0.34 / - ^[C] | | |

[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 | 240 / * | °C | ISO 75-1/-2 |
| Temperature of deflection under load, 0.45 MPa | 250 / * | °C | ISO 75-1/-2 |

Flammability

| | dry/cond. | | |
|--------------------------------------|-----------|-------|-----------------|
| Burning Behav. at 1.5mm nom. thickn. | HB / * | class | IEC 60695-11-10 |

Physical/Other properties

| | dry/cond. | | |
|--------------------------|-----------|-------------------|----------------|
| Humidity absorption, 2mm | 1.7 / * | % | Sim. to ISO 62 |
| Water absorption, 2mm | 5.9 / * | % | Sim. to ISO 62 |
| Density | 1360 / - | 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 |
| Max. mould temperature | 120 °C |

CELANYL® A3 H GF30 BK 9005/R

CELANYL®

Characteristics

| | |
|-------------------------|--|
| Processing | Injection Moulding |
| Delivery form | Granules |
| Special characteristics | Heat stabilised or stable to heat, High Flow |