Celanese
The chemistry inside innovation™

# CELANYL® B2 HH GF50 BK 9005/T1

CELANYL®

*Designed for demanding application, excellent mechanical performances, suitable for Automobile parts.*

## Product information

| | | |
|---|---|---|
| Resin Identification | PA6-GF50 | ISO 1043 |
| Part Marking Code | >PA6-GF50< | ISO 11469 |

## Rheological properties

| | | | |
|---|---|---|---|
| Moulding shrinkage range, parallel | 0.2 - 0.5 | % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal | 0.5 - 0.8 | % | ISO 294-4, 2577 |

## Typical mechanical properties

| | dry/cond. | | |
|---|---|---|---|
| Tensile modulus | 17500 / - | MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 230 / - | MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 2.5 / - | % | ISO 527-1/-2 |
| Charpy impact strength, 23°C | 95 / - | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 14.5 / - | kJ/m² | ISO 179/1eA |
| Izod notched impact strength, 23°C | 16 / - | kJ/m² | ISO 180/1A |
| Izod impact strength, 23°C | >80 / - | kJ/m² | ISO 180/1U |
| Poisson's ratio | 0.33 / -[C] | | |

[C]: Calculated

## Thermal properties

| | dry/cond. | | |
|---|---|---|---|
| Melting temperature, 10°C/min | 225 / * | °C | ISO 11357-1/-3 |

## Physical/Other properties

| | dry/cond. | | |
|---|---|---|---|
| Humidity absorption, 2mm | 0.8 / * | % | Sim. to ISO 62 |
| Density | 1580 / - | kg/m³ | 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 | 260 | °C |
| Min. melt temperature | 240 | °C |
| Max. melt temperature | 290 | °C |
| Screw tangential speed | ≤0.2 | m/s |
| Mold Temperature Optimum | 80 | °C |
| Min. mould temperature | 60 | °C |
| Max. mould temperature | 120 | °C |
| Ejection temperature | 182 | °C |

## Characteristics

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