Celanese
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# CELANYL® A3 J GF15 BK 9005/U

CELANYL®

*Injection molding grade designed for Automotive parts, good impact resistance even at low temperature and good surface quality.*

## Product information

| | | |
|---|---|---|
| Resin Identification | PA66-I-GF15 | ISO 1043 |
| Part Marking Code | >PA66-I-GF15< | ISO 11469 |

## Rheological properties

| | | | |
|---|---|---|---|
| Moulding shrinkage range, parallel | 0.5 - 0.9 | % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal | 0.9 - 1.3 | % | ISO 294-4, 2577 |

## Typical mechanical properties

| | dry/cond. | | |
|---|---|---|---|
| Tensile modulus | 4700 / - | MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 95 / - | MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 4.8 / - | % | ISO 527-1/-2 |
| Flexural modulus | 4200 / - | MPa | ISO 178 |
| Flexural strength | 130 / - | MPa | ISO 178 |
| Charpy impact strength, 23 °C | N / - | kJ/m² | ISO 179/1eU |
| Charpy impact strength, -30 °C | 45 / - | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength, 23 °C | 10.5 / - | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength, -30 °C | 4.8 / - | kJ/m² | ISO 179/1eA |
| Poisson's ratio | 0.36 / -[C] | | |

[C]: Calculated

## Thermal properties

| | dry/cond. | | |
|---|---|---|---|
| Melting temperature, 10 °C/min | 265 / * | °C | ISO 11357-1/-3 |

## 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 | 6.1 / * | % | Sim. to ISO 62 |
| Density | 1180 / - | 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 | 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 |

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| | |
|---|---|
| Max. mould temperature | 100 °C |

## Characteristics

| | |
|---|---|
| Processing | Injection Moulding |
| Delivery form | Granules |
| Special characteristics | High impact or impact modified, U.V. stabilised or stable to weather, Heat stabilised or stable to heat, High Flow |

## Automotive

| OEM | STANDARD | ADDITIONAL INFORMATION |
|---|---|---|
| Mercedes-Benz | DBL5410 | DAIMLER - ELFO AG - Short Circuit Isolation - CNL A3 J GF15 BK9005/U |



Revised: 2024-08-16 Source: Celanese Materials Database