

CELANYL® A4 E GF25 BK 9005/P

CELANYL®

Designed as 'all in one solution' specifically for the profiles extrusion for thermal break.

Product information

| | | |
|--------------------------------|-------------------|-------------|
| Resin Identification | (PA66+PA6)-GF25 | ISO 1043 |
| Part Marking Code | >(PA66+PA6)-GF25< | ISO 11469 |
| Continuous Service Temperature | 100 °C | IEC 60216-1 |

Rheological properties

| | | | |
|------------------------------------|-----------|------------------------|-----------------|
| | dry/cond. | | |
| Melt volume-flow rate | 14/* | cm ³ /10min | ISO 1133 |
| Temperature | 275/* | °C | |
| Load | 5/* | kg | |
| 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 | 8000/5500 | MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 145/95 | MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 4/6.5 | % | ISO 527-1/-2 |
| Flexural modulus | 8000/- | MPa | ISO 178 |
| Flexural strength | 220/- | MPa | ISO 178 |
| Charpy impact strength, 23°C | 65/80 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 12/15 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, 23°C | 12/- | kJ/m ² | ISO 180/1A |
| Izod impact strength, 23°C | 68/- | kJ/m ² | ISO 180/1U |
| Poisson's ratio | 0.34/0.35 ^[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 | 245/* | °C | ISO 75-1/-2 |

Physical/Other properties

| | | | |
|--------------------------|-----------|-------------------|----------------|
| | dry/cond. | | |
| Humidity absorption, 2mm | 1.6/* | % | Sim. to ISO 62 |
| Water absorption, 2mm | 6/* | % | Sim. to ISO 62 |
| Density | 1310/- | 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, Extrusion

Delivery form

Granules