

# ECOMID® B H GF30 BK 9004/2

## ECOMID®

General purpose grade designed for Automotive and Industrial applications. Based on recycled polyamide resin.

### Product information

|                                |            |             |
|--------------------------------|------------|-------------|
| Resin Identification           | PA6-GF30   | ISO 1043    |
| Part Marking Code              | >PA6-GF30< | ISO 11469   |
| Continuous Service Temperature | 110 °C     | IEC 60216-1 |

### Rheological properties

|                                    |             |                 |
|------------------------------------|-------------|-----------------|
| 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                      | 9300 / 5500                | MPa               | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min     | 140 / 85                   | MPa               | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min     | 2.5 / 4                    | %                 | ISO 527-1/-2 |
| Charpy impact strength, 23°C         | 50 / >50                   | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength, 23°C | 7 / 12                     | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Poisson's ratio                      | 0.34 / 0.35 <sup>[C]</sup> |                   |              |
| [C]: Calculated                      |                            |                   |              |

### Thermal properties

|                                                | dry/cond. |    |                |
|------------------------------------------------|-----------|----|----------------|
| Melting temperature, 10°C/min                  | 225 / *   | °C | ISO 11357-1/-3 |
| Temperature of deflection under load, 1.8 MPa  | 205 / *   | °C | ISO 75-1/-2    |
| Temperature of deflection under load, 0.45 MPa | 218 / *   | °C | ISO 75-1/-2    |

### Physical/Other properties

|                          | dry/cond. |                   |                |
|--------------------------|-----------|-------------------|----------------|
| Humidity absorption, 2mm | 1.8 / *   | %                 | Sim. to ISO 62 |
| Water absorption, 2mm    | 6.3 / *   | %                 | Sim. to ISO 62 |
| Density                  | 1360 / -  | kg/m <sup>3</sup> | 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        | 250 °C   |
| Min. melt temperature           | 235 °C   |
| Max. melt temperature           | 280 °C   |
| Screw tangential speed          | ≤0.2 m/s |
| Mold Temperature Optimum        | 80 °C    |
| Min. mould temperature          | 60 °C    |
| Max. mould temperature          | 120 °C   |

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### Characteristics

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