

# ECOMID® A H GF15 BK 9004/2

## ECOMID®

Suitable for various technical applications, this grade shows a good combination of mechanical and thermal performances.

### Product information

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

### Rheological properties

|                                    |             |                 |
|------------------------------------|-------------|-----------------|
| Moulding shrinkage range, parallel | 0.4 - 0.8 % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal   | 0.8 - 1.2 % | ISO 294-4, 2577 |

### Typical mechanical properties

|                                      | dry/cond.                  |                   |              |
|--------------------------------------|----------------------------|-------------------|--------------|
| Tensile modulus                      | 5700 / 4000                | MPa               | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min     | 100 / 70                   | MPa               | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min     | 2 / 7                      | %                 | ISO 527-1/-2 |
| Flexural modulus                     | 4500 / -                   | MPa               | ISO 178      |
| Flexural strength                    | 140 / -                    | MPa               | ISO 178      |
| Charpy impact strength, 23°C         | 30 / >50                   | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength, 23°C | 3 / 5                      | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Izod notched impact strength, 23°C   | 3.5 / -                    | kJ/m <sup>2</sup> | ISO 180/1A   |
| Poisson's ratio                      | 0.35 / 0.36 <sup>[C]</sup> |                   |              |

[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    |

### Physical/Other properties

|                          | dry/cond. |                   |                |
|--------------------------|-----------|-------------------|----------------|
| Humidity absorption, 2mm | 2 / *     | %                 | Sim. to ISO 62 |
| Water absorption, 2mm    | 7.2 / *   | %                 | Sim. to ISO 62 |
| Density                  | 1230 / -  | 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        | 285 °C   |
| Min. melt temperature           | 275 °C   |
| Max. melt temperature           | 295 °C   |
| Screw tangential speed          | ≤0.2 m/s |
| Mold Temperature Optimum        | 100 °C   |
| Min. mould temperature          | 70 °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 |

### Automotive

| OEM      | STANDARD | ADDITIONAL INFORMATION                                   |
|----------|----------|--|
| VW Group | VW 50127 | *Best Fitting Grade To PA66-4, Not Officially Approved   |
| VW Group | VW 50133 | *Best Fitting Grade To PA66-3-A, Not Officially Approved |