

## ECOMID® B GF40 BK 9005/1 - PA6

### Description

(OMNILON® PA6 U GR40 BK1000)  
40% Glass Reinforced, Utility Grade, PA6

| Physical properties           | Value | Unit               | Test Standard |
|-------------------------------|-------|--------------------|---------------|
| Density                       | 90.5  | lb/ft <sup>3</sup> | ISO 1183      |
| Mechanical properties         | Value | Unit               | Test Standard |
| Tensile stress at yield, 23°C | 23100 | psi                | ASTM D638     |
| Flexural modulus, 23°C        | 1.5E6 | psi                | ASTM D790     |
| Flexural stress, 23°C         | 33500 | psi                | ASTM D790     |
| Izod impact notched, 23°C     | 1.8   | ft-lb/in           | ASTM D256     |
| Thermal properties            | Value | Unit               | Test Standard |
| DTUL at 1.8 MPa               | 410   | °F                 | ISO 75-1, -2  |
| DTUL at 0.45 MPa              | 424   | °F                 | ISO 75-1, -2  |

### Typical injection molding processing conditions

| Pre Drying                                      | Value     | Unit |
|-------------------------------------------------|-----------|------|
| Necessary low maximum residual moisture content | 0.15      | %    |
| Drying time                                     | 4 - 8     | h    |
| Drying temperature                              | 176 - 194 | °F   |
| Temperature                                     | Value     | Unit |
| Zone1 temperature                               | 428 - 446 | °F   |
| Zone2 temperature                               | 437 - 455 | °F   |
| Zone3 temperature                               | 455 - 473 | °F   |
| Zone4 temperature                               | 473 - 491 | °F   |
| Nozzle temperature                              | 491 - 518 | °F   |
| Melt temperature                                | 482 - 518 | °F   |
| Mold temperature                                | 140 - 176 | °F   |
| Hot runner temperature                          | 491 - 518 | °F   |

### Characteristics

|                         |                   |
|-------------------------|-------------------|
| Special Characteristics | Recycled content  |
| Product Categories      | Glass reinforced  |
| Processing              | Injection molding |

### Other Approvals

| OEM       | Specification | Additional Information                                 |
|-----------|---------------|--------------------------------------------------------|
| VW Group* | VW50125       | * best fitting grade to PA6-9, not officially approved |