

## OMNILON® PA6 U GMR40 HS UV BK2000 - PA6

| Physical properties         | Value | Unit              | Test Standard   |
|-----------------------------|-------|-------------------|-----------------|
| Density                     | 1480  | kg/m <sup>3</sup> | ISO 1183        |
| Molding shrinkage, parallel | 1.0   | %                 | ISO 294-4, 2577 |
| Molding shrinkage, normal   | 1.4   | %                 | ISO 294-4, 2577 |

| Mechanical properties                | Value | Unit              | Test Standard |
|--------------------------------------|-------|-------------------|---------------|
| Tensile modulus                      | 10000 | MPa               | ISO 527-2/1A  |
| Tensile stress at break, 5mm/min     | 110   | MPa               | ISO 527-2/1A  |
| Tensile strain at break, 5mm/min     | 2     | %                 | ISO 527-2/1A  |
| Flexural modulus, 23°C               | 9000  | MPa               | ISO 178       |
| Flexural strength, 23°C              | 170   | MPa               | ISO 178       |
| Charpy impact strength, 23°C         | 43    | kJ/m <sup>2</sup> | ISO 179/1eU   |
| Charpy notched impact strength, 23°C | 5.3   | kJ/m <sup>2</sup> | ISO 179/1eA   |

### Typical injection moulding processing conditions

| Pre Drying                                      | Value     | Unit | Test Standard |
|-------------------------------------------------|-----------|------|---------------|
| Necessary low maximum residual moisture content | 0.15      | %    | -             |
| Drying time                                     | 4 - 8     | h    | -             |
| Drying temperature                              | 80 - 90   | °C   | -             |
| Temperature                                     | Value     | Unit | Test Standard |
| Zone1 temperature                               | 220 - 230 | °C   | -             |
| Zone2 temperature                               | 225 - 235 | °C   | -             |
| Zone3 temperature                               | 235 - 245 | °C   | -             |
| Zone4 temperature                               | 245 - 255 | °C   | -             |
| Nozzle temperature                              | 255 - 270 | °C   | -             |
| Melt temperature                                | 250 - 270 | °C   | -             |
| Mold temperature                                | 60 - 80   | °C   | -             |
| Hot runner temperature                          | 255 - 270 | °C   | -             |

