

## OMNILON® PA6 U GR40 - PA6

| Physical properties | Value | Unit  | Test Standard |
|---------------------|-------|-------|---------------|
| Density             | 1450  | kg/m³ | ISO 1183      |

| Mechanical properties         | Value | Unit | Test Standard |
|-------------------------------|-------|------|---------------|
| Tensile stress at yield, 23°C | 159   | MPa  | ASTM D 638    |
| Tensile strain at break, 23°C | 3     | %    | ASTM D 638    |
| Flexural modulus, 23°C        | 10300 | MPa  | ASTM D 790    |
| Flexural stress, 23°C         | 231   | MPa  | ASTM D 790    |
| Izod impact notched, 23°C     | 96    | J/m  | ASTM D 256    |

| Thermal properties | Value | Unit | Test Standard |
|--------------------|-------|------|---------------|
| DTUL at 1.8 MPa    | 210   | °C   | ISO 75-1, -2  |
| DTUL at 0.45 MPa   | 218   | °C   | ISO 75-1, -2  |

### 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   | -             |

