

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

| <b>Physical properties</b>  | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|-----------------------------|--------------|-------------------|----------------------|
| 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      |

| <b>Mechanical properties</b>         | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|--------------------------------------|--------------|-------------------|----------------------|
| 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**

| <b>Pre Drying</b>                               | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---|--------------|-------------|----------------------|
| Necessary low maximum residual moisture content | 0.15         | %           | -                    |
| Drying time                                     | 4 - 8        | h           | -                    |
| Drying temperature                              | 80 - 90      | °C          | -                    |
| <b>Temperature</b>                              | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
| 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          | -                    |