

## OMNILON® PA6 IM20 NA - PA6

| Physical properties | Value | Unit              | Test Standard |
|---------------------|-------|-------------------|---------------|
| Density             | 1070  | kg/m <sup>3</sup> | ISO 1183      |

| Mechanical properties                | Value | Unit              | Test Standard |
|--------------------------------------|-------|-------------------|---------------|
| Tensile modulus                      | 2150  | MPa               | ISO 527-2/1A  |
| Tensile stress at yield, 50mm/min    | 52    | MPa               | ISO 527-2/1A  |
| Tensile strain at break, 50mm/min    | 46    | %                 | ISO 527-2/1A  |
| Flexural modulus, 23°C               | 1700  | MPa               | ISO 178       |
| Flexural strength, 23°C              | 68    | MPa               | ISO 178       |
| Charpy notched impact strength, 23°C | 57    | kJ/m <sup>2</sup> | ISO 179/1eA   |

| Thermal properties | Value | Unit | Test Standard |
|--------------------|-------|------|---------------|
| DTUL at 1.8 MPa    | 54    | °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   | -             |

