

# RADITER BN 100 T 2051 BIA

Material code      Colour code

## DESCRIPTION

PBT injection moulding grade. Toughened. White colour.

General purpose grade, suitable for parts requiring good impact resistance.

ISO 1043 : PBT-I

## MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging. It is important to dry the material prior to processing: maximum recommended water content is 0.02%. Typical conditions with a desiccant drier: temperature 120 ° C, dew point -40 ° C or below, time 2-4 h or more.

Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

### Processing Parameters

|                   |                   |                  |
|-------------------|-------------------|------------------|
| Melt Temperature: | Mold Temperature: | Injection Speed: |
| 250 ÷ 290 °C      | 60 ÷ 80 °C        | Medium           |

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

RoHS compliant 2002/95/CE and following amendments

## Technical data sheet

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| PROPERTY                         |           | STANDARD        | UNIT              | VALUE  |
|----------------------------------|-----------|-----------------|-------------------|--------|
| <b>Physical Properties</b>       |           |                 |                   |        |
| Density                          |           | ISO 1183        | Kg/m <sup>3</sup> | 1280   |
| <b>Mechanical Properties</b>     |           |                 |                   |        |
| Tensile Modulus                  | 1mm/min   | ISO 527-2/1A    | MPa               | 2100   |
| Stress at Yield                  | 50mm/min  | ISO 527-2/1A    | MPa               | 45     |
| Yield Strain                     | 50mm/min  | ISO 527-2/1A    | %                 | 4.4    |
| Nominal Strain at Break          | 50mm/min  | ISO 527-2/1A    | %                 | 25     |
| Flexural Modulus                 | 2mm/min   | ISO 178         | MPa               | 2050   |
| Flexural Strength                | 2mm/min   | ISO 178         | MPa               | 70     |
| Charpy Notched Impact Strength   | +23°C     | ISO 179/1 eA    | KJ/m <sup>2</sup> | 10     |
| <b>Thermal Properties</b>        |           |                 |                   |        |
| Melting Temperature              | 10°C/min  | ISO 11357-1-3   | °C                | 225    |
| Heat Deflection Temperature      | 1.8 MPa   | ISO 75/2 A f    | °C                | 60     |
| Vicat Softening Temperature      | 50°C/h    | ISO 306/B50 50N | °C                | 165    |
| <b>Flammability Properties</b>   |           |                 |                   |        |
| Flammability                     | 0.8mm     | UL 94           | class             | HB     |
| Automotive interior flammability | Burn rate | FMVSS302        | mm/min            | <10    |
| <b>Electrical Properties</b>     |           |                 |                   |        |
| Volume resistivity               | 500V      | IEC 60093       | ohm · m           | 1 E+13 |
| Surface resistivity              | 500V      | IEC 60093       | ohm               | 1 E+12 |

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