

# Technical Data Sheet

## ROTEC® ABS 1001 FR/E



*Injection moulding and extrusion grade, flame retardant, UL 94 V-0*

| <i>Properties</i>                   | <i>Unit</i>       | <i>Test Method</i> | <i>Test Condition</i>          | <i>Value*</i> | <i>Remarks</i> |
|-------------------------------------|-------------------|--------------------|--------------------------------|---------------|----------------|
| <i>Mechanical.....</i>              |                   |                    |                                |               |                |
| Tensile Modulus                     | MPa               | ISO 527            | 23°C<br>1 mm/min               | 2,450         |                |
| Tensile Strength                    | MPa               | ISO 527            | 23°C<br>50 mm/min              | 40            |                |
| Elongation at Break                 | %                 | ISO 527            | 23°C<br>50 mm/min              | 18            |                |
| Flexural Modulus                    | MPa               | ISO 178            | 23°C<br>2 mm/min               | 2,300         |                |
| Flexural Strength                   | MPa               | ISO 178            | 23°C<br>2 mm/min               | 68            |                |
| Impact Strength Notched (Charpy)    | kJ/m <sup>2</sup> | ISO 179 1eA        | 80 x 10 x 4 mm<br>23°C / -30°C | 18 / 8        |                |
| Impact Strength (Charpy)            | kJ/m <sup>2</sup> | ISO 179 1eU        | 80 x 10 x 4 mm<br>23°C / -30°C | n.b. / n.b.   |                |
| <i>Physical.....</i>                |                   |                    |                                |               |                |
| Density                             | g/cm <sup>3</sup> | ISO 1183           | 23°C, 50% RH                   | 1.17          |                |
| Water Absorption                    | %                 | ISO 62             | 23°C, 24 h                     | 0.3           |                |
| <i>Thermal.....</i>                 |                   |                    |                                |               |                |
| Heat Distortion Temperature (HDT A) | °C                | ISO 75             | 1.8 MPa                        | 85            |                |
| Vicat Softening Temperature (B 50)  | °C                | ISO 306            | 50°C/h<br>50 N                 | 97            |                |
| Melt Flow Rate MFR                  | g/10 min          | ISO 1133           | 220°C<br>10 kg                 | 20            |                |
| Moulding Shrinkage                  | %                 | ISO 294-4          | 23°C                           | 0.3 - 0.6     |                |
| Flammability                        | Class             | UL 94              | 1.5 mm                         | V-0           |                |

\* = Average figures which could vary with each production batch due to addition of pigments, antistatic agents, slip agents, light stabilizers or other additives.

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