

# Technical Data Sheet



## ROTEC® ABS 1001 GK20

*Injection moulding grade, 20% glass beads reinforced*

| <i>Properties</i>                            | <i>Unit</i>                        | <i>Test Method</i> | <i>Test Condition</i>  | <i>Value*</i> |
|--|------------------------------------|--------------------|------------------------|---------------|
| <b><i>Mechanical .....</i></b>               |                                    |                    |                        |               |
| Tensile Modulus                              | MPa                                | DIN EN ISO 527     | 23°C<br>1 mm/min       | 3,000         |
| Tensile Strength                             | MPa                                | DIN EN ISO 527     | 23°C<br>5 mm/min       | 34            |
| Elongation at Break                          | %                                  | DIN EN ISO 527     | 23°C<br>5 mm/min       | 15            |
| Flexural Modulus                             | MPa                                | DIN EN ISO 178     | 23°C<br>2 mm/min       | 2,900         |
| Flexural Strength                            | MPa                                | DIN EN ISO 178     | 23°C<br>2 mm/min       | 68            |
| Notched Impact Strength (Charpy)             | kJ/m <sup>2</sup>                  | DIN EN ISO 179/1eA | 80 x 10 x 4 mm<br>23°C | -             |
| Impact Strength (Charpy)                     | kJ/m <sup>2</sup>                  | DIN EN ISO 179/1eU | 80 x 10 x 4 mm<br>23°C | 30            |
| <b><i>Physical .....</i></b>                 |                                    |                    |                        |               |
| Density                                      | g/cm <sup>3</sup>                  | DIN EN ISO 1183    | 23°C, 50% RH           | 1.17          |
| Water Absorption                             | %                                  | DIN EN ISO 62      | 23°C, 24 h             | 0.3           |
| <b><i>Thermal .....</i></b>                  |                                    |                    |                        |               |
| Heat Distortion Temperature A                | °C                                 | DIN EN ISO 75/1    | 1.8 MPa                | -             |
| Vicat Softening Temperature B 50             | °C                                 | DIN EN ISO 306     | 50 N<br>50°C/h         | 100           |
| Melt Mass Flow Rate (MFR)                    | g/10 min                           | DIN EN ISO 1133    | 220°C, 10 kg           | 18            |
| Thermal Conductivity                         | W/(K·m)                            | DIN 52612          | --                     | -             |
| Thermal Coefficient of Linear Expansion      | 10 <sup>-4</sup> · K <sup>-1</sup> | ISO 11359-2        | 23°C - 55°C            | -             |
| Processing Shrinkage                         | %                                  | DIN EN ISO 294-4   | 23°C                   | -             |
| Flammability (File No.: E148878 → UL listed) | --                                 | UL94               | 1.5 mm                 | HB            |

\* = These are average figures, which could vary in each production batch due to addition of pigments, antistatica, slip, uv stabilizer or other.

The information submitted is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

