

## Tecomid® NT40 GR50 BK009 HS

PPA, 50% glass fiber reinforced, heat stabilized, black

| Property (dry as molded)                        | Condition         | Value    | Unit              | Standard   |
|---|-------------------|----------|-------------------|------------|
| <b>General Properties</b>                       |                   |          |                   |            |
| Abbreviation                                    | -                 | PPA-GF50 | -                 | ISO 1043   |
| Density   | -                 | 1,63     | g/cm <sup>3</sup> | ISO 1183   |
| Melt Flow Rate                                  | 2.16kg, 270 °C    | -        | g/10'             | ISO 1133   |
| Molding Shrinkage                               | Parallel / Normal | -        | %                 | Eurotec    |
| Moisture Content                                | -                 | <0,2     | %                 | ISO 960    |
| Moisture Absorption                             | 50% RH, 23 °C     | -        | %                 | ISO 62     |
| <b>Mechanical Properties</b>                    |                   |          |                   |            |
| Stress at Break                                 | +23°C             | 200      | MPa               | ISO 527    |
| Strain at Break                                 | +23°C             | 1,5      | %                 | ISO 527    |
| Tensile Modulus                                 | +23°C             | 18000    | MPa               | ISO 527    |
| Yield Strength                                  | +23°C             | -        | MPa               | ISO 527    |
| Izod Impact, notched                            | +23 °C            | 11       | kJ/m <sup>2</sup> | ISO 180/1A |
| Izod Impact, notched                            | -30 °C            | 10       | kJ/m <sup>2</sup> | ISO 180/1A |
| Izod Impact, un-notched                         | +23 °C            | -        | kJ/m <sup>2</sup> | ISO 180/1U |
| Izod Impact, un-notched                         | -30 °C            | -        | kJ/m <sup>2</sup> | ISO 180/1U |
| <b>Thermal Properties</b>                       |                   |          |                   |            |
| Melting Temperature                             | 10 K/min          | 300      | °C                | ISO 11357  |
| Heat Deformation Temperature                    | 0.45 MPa          | -        | °C                | ISO 75     |
| Heat Deformation Temperature                    | 1.80 MPa          | 285      | °C                | ISO 75     |
| Vicat Softening Temperature                     | 50N               | -        | °C                | ISO 306    |
| <b>Electrical Properties &amp; Flammability</b> |                   |          |                   |            |
| Volume Resistivity                              | -                 | -        | Ohm.cm            | IEC 60093  |
| Surface Resistivity                             | -                 | -        | Ohm               | IEC 60093  |
| Comparative Tracking Index                      | solution A        | -        | V                 | IEC 60112  |
| Glow Wire Flammability Index (GWFI)             | 2 mm plaque       | -        | °C                | IEC 60695  |
| Glow Wire Ignitability Temperature (GWIT)       | 2 mm plaque       | -        | °C                | IEC 60695  |
| Flame Rating                                    | 0.75 mm           | HB       | -                 | UL94       |
| Flame Rating                                    | 1.6 mm            | HB       | -                 | UL94       |

| <b>Processing Parameters</b> |  |             |         |  |
|------------------------------|--|-------------|---------|--|
| Drying*                      |  | 100-130 / 4 | °C / hr |  |
| Feed Throat Temperature      |  | 45 - 60     | °C      |  |
| Processing Temperature       |  | 300 - 3200  | °C      |  |
| Mold Temperature             |  | 140 - 160   | °C      |  |
| Hold Pressure                |  | 50 - 70     | MPa     |  |
| Back Pressure                |  | Medium      | -       |  |
| Injection Speed              |  | Fast        | -       |  |

\* Pre-drying is not necessary for materials in moisture proof closed bags.

All mentioned information in this technical data sheet present current knowledge and experience of Eurotec. The data may not be valid when this product is used in combination with other materials such as pigments or additives. Please note that the data are given dry as molded values related to the mentioned material only. Naturally, these data do not guarantee certain values since may vary on customers processing conditions, so they are provided for reference purposes only and should not be used alone to create specification limits and design basis. It is strongly recommended for customers to test the product under their own processing conditions and test facilities to determine the suitability for the required application and use.