

## Technical Data Sheet



### ALTECH PBT A 5262/500 GF 30, MR32

|                        |                                                    |
|------------------------|----------------------------------------------------|
| Base Polymer           | Polybutylene Terephthalate                         |
| Filler/Additive System | 62 % glass fibre/mineral                           |
| Special Features       | high density,heat stabilised,high acoustic damping |
| Market Segment         | Automotive                                         |
| Application Area       | injection moulded parts                            |
| Typical Applications   | housings,functional components                     |

|                               |                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | in a dry air (dessiccant) dryer <120 °C<br>for 2-4 h<br>dependant on moisture content |
| Processing Injection Moulding | melt temperature 270-290 °C<br>mould temperature 80-120 °C                            |
| Storage                       | dry, protected from light                                                             |

| Properties                              | Value     | Dimension              | Test Norm   |
|-----------------------------------------|-----------|------------------------|-------------|
| <b>Mechanical Properties</b>            |           |                        |             |
| Flexural Modulus                        | 12800     | MPa                    | ISO 178     |
| Flexural Strength                       | 145       | MPa                    | ISO 178     |
| Tensile Modulus                         | 14500     | MPa                    | ISO 527     |
| Tensile Strength at Break               | 100       | MPa                    | ISO 527     |
| Tensile Elongation at Break             | 1.2       | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 28        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 25        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 6         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 4.5       | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                        |             |
| Vicat B50                               | 213       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                       | 207       | °C                     | ISO 75-1/-2 |
| DSC (Melt Point)                        | 222       | °C                     | ISO 11357   |
| <b>Rheological Properties</b>           |           |                        |             |
| Melt Index (MVR)                        | 2         | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                         | 260       | °C                     | -           |
| MVR load                                | 2.16      | kg                     | -           |
| Shrinkage (lengthwise, 24h)             | 0.2 - 0.4 | %                      | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 0.4 - 0.6 | %                      | ISO 294-4   |
| <b>Physical Properties</b>              |           |                        |             |
| Density                                 | 2120      | kg/m <sup>3</sup>      | ISO 1183    |