

## Technical Data Sheet



## ALTECH PBT A 2030/346 GF30 FR

|                               |                                                                                                                                                                                  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Base Polymer                  | Polybutylene Terephthalate                                                                                                                                                       |
| Filler/Additive System        | 30 % glass fibres                                                                                                                                                                |
| Special Features              | flame retardant,easy flow,heat stabilised,impact modified,processing stabilised                                                                                                  |
| Market Segment                | Machinery,electrical and electronic                                                                                                                                              |
| Application Area              | electrical components                                                                                                                                                            |
| Typical Applications          | injection moulded parts,functional components                                                                                                                                    |
| Pre-Drying Conditions         | in a dry air (dessiccant) dryer 100-120 °C<br>for 2-4 h<br>in an air circulating dryer 100-120 °C<br>for 4-8 h<br>dependant on moisture content<br>max. moisture content <0,02 % |
| Processing Injection Moulding | melt temperature 250-270 °C<br>mould temperature 80-120 °C                                                                                                                       |
| Storage                       | dry, protected from light                                                                                                                                                        |

| Properties                              | Value     | Dimension         | Test Norm   |
|-----------------------------------------|-----------|-------------------|-------------|
| <b>Mechanical Properties</b>            |           |                   |             |
| Flexural Modulus                        | 8900      | MPa               | ISO 178     |
| Flexural Strength                       | 170       | MPa               | ISO 178     |
| Tensile Modulus                         | 10000     | MPa               | ISO 527     |
| Tensile Strength at Break               | 110       | MPa               | ISO 527     |
| Tensile Elongation at Break             | 1.9       | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 50        | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 45        | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 8         | kJ/m <sup>2</sup> | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 5.5       | kJ/m <sup>2</sup> | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                   |             |
| Vicat B50                               | 210       | °C                | ISO 306     |
| HDT / A (1,8 MPa)                       | 209       | °C                | ISO 75-1/-2 |
| <b>Rheological Properties</b>           |           |                   |             |
| Shrinkage (lengthwise, 24h)             | 0.2 - 0.4 | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 0.9 - 1.1 | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |           |                   |             |
| Density                                 | 1650      | kg/m <sup>3</sup> | ISO 1183    |
| <b>Flammability</b>                     |           |                   |             |
| Flammability (1.5 mm)                   | V-2       | class             | UL 94       |