

## Technical Data Sheet



### ALTECH PA6 B 2030/500 GF30

|                        |                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------|
| Base Polymer           | Polyamide 6                                                                                                          |
| Filler/Additive System | 30 % glass fibres                                                                                                    |
| Colour                 | black                                                                                                                |
| Special Features       | glycol resistant,hot oil resistant,good chemical resistance,easy flow,easy release (demoulding),high heat stabilised |
| Market Segment         | Automotive,building and construction,Machinery                                                                       |
| Application Area       | engine and drive systems,injection moulded parts,clothing / fasteners,exterior parts                                 |
| Typical Applications   | different automotive powertrain parts,oil pans / sumps,functional components,housings                                |

|                       |                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions | 80 °C in a dry air (dessiccant) dryer for 2-12 h<br>dependant on moisture content<br>max. moisture content <0,15 % |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| Processing Injection Moulding | melt temperature 270-290 °C<br>mould temperature 80-100 °C |
|-------------------------------|------------------------------------------------------------|

|         |                           |
|---------|---------------------------|
| Storage | dry, protected from light |
|---------|---------------------------|

| Properties                              | Value     | Dimension         | Test Norm   |
|-----------------------------------------|-----------|-------------------|-------------|
| <b>Mechanical Properties</b>            |           |                   |             |
| Flexural Modulus                        | 8200      | MPa               | ISO 178     |
| Flexural Strength                       | 200       | MPa               | ISO 178     |
| Tensile Modulus                         | 8500      | MPa               | ISO 527     |
| Tensile Strength at Break               | 150       | MPa               | ISO 527     |
| Tensile Elongation at Break             | 2.7       | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 50        | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 40        | 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) | 7         | kJ/m <sup>2</sup> | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                   |             |
| HDT / A (1,8 MPa)                       | 200       | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                        | 220       | °C                | ISO 11357   |
| <b>Rheological Properties</b>           |           |                   |             |
| Shrinkage (lengthwise, 24h)             | 0.2 - 0.4 | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 0.7 - 0.9 | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |           |                   |             |
| Density                                 | 1360      | kg/m <sup>3</sup> | ISO 1183    |