

## Technical Data Sheet



### ALTECH PA6 A 2030/606 GF30

|                        |                                                                 |
|------------------------|-----------------------------------------------------------------|
| Base Polymer           | Polyamide 6                                                     |
| Filler/Additive System | 30 % glass fibres                                               |
| Colour                 | grey                                                            |
| Special Features       | nucleated,processing stabilised,easy release (demoulding)       |
| Market Segment         | Automotive                                                      |
| Application Area       | cooling system,engine and drive systems,injection moulded parts |
| Typical Applications   | oil pump parts,housings,functional components                   |

|                       |                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions | 80 °C in a dry air (dessiccant) dryer<br>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                              | dry/cond.   | Dimension         | Test Norm   |
|-----------------------------------------|-------------|-------------------|-------------|
| <b>Mechanical Properties</b>            |             |                   |             |
| Flexural Modulus                        | 8000 / 4700 | MPa               | ISO 178     |
| Flexural Strength                       | 205 / 120   | MPa               | ISO 178     |
| Tensile Modulus                         | 8500 / 5300 | MPa               | ISO 527     |
| Tensile Strength at Break               | 130 / 75    | MPa               | ISO 527     |
| Tensile Elongation at Break             | 2.5 / 6.5   | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 40 / 65     | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 35 / -      | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 5.5 / 8.5   | kJ/m <sup>2</sup> | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 3.5 / -     | kJ/m <sup>2</sup> | ISO 179/1eA |
| <b>Thermal Properties</b>               |             |                   |             |
| HDT / A (1,8 MPa)                       | 203 / *     | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                        | 220 / *     | °C                | ISO 11357   |
| <b>Rheological Properties</b>           |             |                   |             |
| Shrinkage (lengthwise, 24h)             | 0.1 - 0.3   | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 0.7 - 0.9   | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |             |                   |             |
| Density                                 | 1350 / -    | kg/m <sup>3</sup> | ISO 1183    |