

## Technical Data Sheet



### ALTECH PA6 A 2050/500 GF50

## MOCOM

|                        |                                                                        |
|------------------------|------------------------------------------------------------------------|
| Base Polymer           | Polyamide 6                                                            |
| Filler/Additive System | 50 % glass fibres                                                      |
| Colour                 | black,natural color                                                    |
| Special Features       | heat stabilised,easy release (demoulding),good flow                    |
| Market Segment         | Automotive                                                             |
| Application Area       | injection moulded parts,exterior parts,interior decoration / finishing |
| Typical Applications   | functional components,pedals,different automotive powertrain parts     |

|                       |                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------|
| 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                        | 15700 / 10000 | MPa               | ISO 178     |
| Flexural Strength                       | 350 / 225     | MPa               | ISO 178     |
| Tensile Modulus                         | 16500 / 10400 | MPa               | ISO 527     |
| Tensile Strength at Break               | 220 / 145     | MPa               | ISO 527     |
| Tensile Elongation at Break             | 2.9 / 4.7     | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 95 / 90       | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 85 / -        | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 15 / 20       | kJ/m <sup>2</sup> | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 12 / -        | kJ/m <sup>2</sup> | ISO 179/1eA |
| <b>Thermal Properties</b>               |               |                   |             |
| HDT / A (1,8 MPa)                       | 219 / *       | °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)                | 0.3 - 0.5     | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |               |                   |             |
| Density                                 | 1580 / -      | kg/m <sup>3</sup> | ISO 1183    |