

## Technical Data Sheet



## ALTECH PA6 A 1000/518 IM

|                      |                                                        |
|----------------------|--------------------------------------------------------|
| Base Polymer         | Polyamide 6                                            |
| Colour               | black,natural color                                    |
| Special Features     | impact modified,easy release (demoulding)              |
| Market Segment       | Automotive,Machinery                                   |
| Typical Applications | housings,functional components,injection moulded parts |

|                               |                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | 80 °C in a dry air (dessiccant) dryer<br>for 2-12 h<br>dependant on moisture content<br>0,15 % max. moisture content |
| Processing Injection Moulding | melt temperature 250-270 °C<br>mould temperature 60-100 °C                                                           |
| Storage                       | dry, protected from light                                                                                            |

| Properties                              | Value     | Dimension         | Test Norm   |
|-----------------------------------------|-----------|-------------------|-------------|
| <b>Mechanical Properties</b>            |           |                   |             |
| Flexural Modulus                        | 2300      | MPa               | ISO 178     |
| Flexural Stress (3.5% Strain)           | 75        | MPa               | ISO 178     |
| Tensile Modulus                         | 2500      | MPa               | ISO 527     |
| Tensile Stress at Yield                 | 65        | MPa               | ISO 527     |
| Tensile Elongation at Yield             | 3.9       | %                 | ISO 527     |
| Tensile Elongation at Break             | 20        | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | no break  | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 250       | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 7         | 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>               |           |                   |             |
| HDT / A (1,8 MPa)                       | 60        | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                        | 220       | °C                | ISO 11357   |
| <b>Rheological Properties</b>           |           |                   |             |
| Shrinkage (lengthwise, 24h)             | 1.1 - 1.3 | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 1.5 - 1.7 | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |           |                   |             |
| Density                                 | 1110      | kg/m <sup>3</sup> | ISO 1183    |