

## Technical Data Sheet



### ALTECH PA6 A 2040/100 GF40

|                        |                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------|
| Base Polymer           | Polyamide 6                                                                                  |
| Filler/Additive System | 40 % glass fibres                                                                            |
| Colour                 | natural color,black                                                                          |
| Special Features       | high heat stabilised,easy release (demoulding),easy flow,processing stabilised               |
| Market Segment         | Automotive,Machinery,electrical and electronic                                               |
| Application Area       | interior decoration / finishing,exterior parts,electrical components,injection moulded parts |
| Typical Applications   | housings,functional components,operating elements                                            |

|                       |                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------|
| 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                        | 11400 / 6900 | MPa       | ISO 178     |
| Flexural Strength                       | 290 / 180    | MPa       | ISO 178     |
| Tensile Modulus                         | 12500 / 7000 | MPa       | ISO 527     |
| Tensile Strength at Break               | 190 / 115    | MPa       | ISO 527     |
| Tensile Elongation at Break             | 3.4 / 5.7    | %         | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 85 / 100     | kJ/m²     | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 70 / -       | kJ/m²     | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 13 / 25      | kJ/m²     | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 10 / -       | kJ/m²     | ISO 179/1eA |
| <b>Thermal Properties</b>               |              |           |             |
| HDT / A (1,8 MPa)                       | 215 / *      | °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)                | 0.6 - 0.8    | %         | ISO 294-4   |
| <b>Physical Properties</b>              |              |           |             |
| Density                                 | 1450 / -     | kg/m³     | ISO 1183    |

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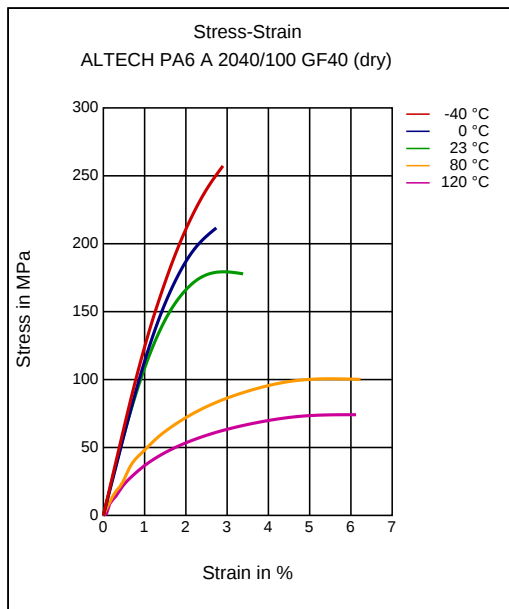


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(Last update: 17.08.2023)

#### Diagrams

##### Stress-Strain



##### Stress-Strain

