

## Technical Data Sheet



### ALCOM PA6 900/1 GF10 GB20

|                        |                                     |
|------------------------|-------------------------------------|
| Base Polymer           | Polyamide 6                         |
| Filler/Additive System | 10 % glass fibres, 20 % glass beads |
| Special Features       | heat stabilised, low warpage        |
| Market Segment         | Automotive, Machinery               |
| Application Area       | various                             |

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | 80 °C in a dry air (dessiccant) dryer<br>for 2-12 h<br>dependant on moisture content |
| 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                         | 5000 / 2400 | MPa               | ISO 178     |
| Flexural Stress (3.5% Strain)            | - / 62      | MPa               | ISO 178     |
| Flexural Strength                        | 155 / -     | MPa               | ISO 178     |
| Tensile Modulus                          | 5500 / 2200 | MPa               | ISO 527     |
| Tensile Strength at Break                | 100 / 64    | MPa               | ISO 527     |
| Tensile Elongation at Break              | 3.1 / 12    | %                 | ISO 527     |
| Impact Strength (Charpy, 23 °C)          | 34 / 100    | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40 °C)         | 30 / -      | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23 °C)  | 5 / 9       | kJ/m <sup>2</sup> | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40 °C) | 4 / -       | kJ/m <sup>2</sup> | ISO 179/1eA |
| <b>Thermal Properties</b>                |             |                   |             |
| HDT / A (1,8 MPa)                        | 194 / *     | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                         | 221 / *     | °C                | ISO 11357   |
| <b>Rheological Properties</b>            |             |                   |             |
| Shrinkage (lengthwise, 24h)              | 0.5 - 0.7   | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                 | 0.9 - 1.1   | %                 | ISO 294-4   |
| <b>Physical Properties</b>               |             |                   |             |
| Density                                  | 1340 / -    | kg/m <sup>3</sup> | ISO 1183    |