

## Technical Data Sheet



### ALCOM PA66 910/1.1 CF10 PTFE20

|                        |                                                                                             |
|------------------------|---------------------------------------------------------------------------------------------|
| Base Polymer           | Polyamide 66                                                                                |
| Filler/Additive System | 10 % carbon fibres,20 % PTFE                                                                |
| Special Features       | improved sliding / wear,heat stabilised,reduced surface resistivity,electrically conductive |
| Market Segment         | Automotive,Machinery                                                                        |
| Application Area       | injection moulded parts                                                                     |
| Typical Applications   | functional components,bearings and sliding elements                                         |

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| Pre-Drying Conditions         | 80 °C in a dry air (dessiccant) dryer for 2-12 h<br>dependant on moisture content |
| Processing Injection Moulding | melt temperature 280-300 °C<br>mould temperature 80-120 °C                        |
| Storage                       | dry, protected from light                                                         |

| Properties                              | dry/cond.    | Dimension         | Test Norm     |
|-----------------------------------------|--------------|-------------------|---------------|
| <b>Mechanical Properties</b>            |              |                   |               |
| Flexural Modulus                        | 9100 / 6200  | MPa               | ISO 178       |
| Flexural Strength                       | 220 / 155    | MPa               | ISO 178       |
| Tensile Modulus                         | 11000 / 7300 | MPa               | ISO 527       |
| Tensile Strength at Break               | 155 / 110    | MPa               | ISO 527       |
| Tensile Elongation at Break             | 2.4 / 4.1    | %                 | ISO 527       |
| Impact Strength (Charpy, 23°C)          | 40 / 50      | 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 / 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)                       | 252 / *      | °C                | ISO 75-1/-2   |
| DSC (Melt Point)                        | 263 / *      | °C                | ISO 11357     |
| <b>Electrical Properties</b>            |              |                   |               |
| Surface Resistance                      | * / 500      | Ohm               | IEC 62631-3-2 |
| <b>Rheological Properties</b>           |              |                   |               |
| Shrinkage (lengthwise, 24h)             | 0.1 - 0.3    | %                 | ISO 294-4     |
| Shrinkage (lateral, 24h)                | 0.4 - 0.6    | %                 | ISO 294-4     |
| <b>Physical Properties</b>              |              |                   |               |
| Density                                 | 1300 / -     | kg/m <sup>3</sup> | ISO 1183      |