

## Technical Data Sheet



### ALCOM PA6 900/1 GF30 TF15 SI2 IM

|                        |                                                          |
|------------------------|----------------------------------------------------------|
| Base Polymer           | Polyamide 6                                              |
| Filler/Additive System | 30 % glass fibres, 17 % PTFE/Silicone                    |
| Special Features       | high stiffness, heat stabilised, improved sliding / wear |
| Market Segment         | Automotive, Machinery                                    |
| Typical Applications   | functional components                                    |

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| 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                        | 6100 / -  | MPa               | ISO 178             |
| Flexural Strength                       | 125 / -   | MPa               | ISO 178             |
| Tensile Modulus                         | 7700 / -  | MPa               | ISO 527             |
| Tensile Strength at Break               | 95 / -    | MPa               | ISO 527             |
| Tensile Elongation at Break             | 3.9 / -   | %                 | ISO 527             |
| Impact Strength (Charpy, 23°C)          | 55 / -    | kJ/m <sup>2</sup> | ISO 179/1eU         |
| Impact Strength (Charpy, -40°C)         | 55 / -    | kJ/m <sup>2</sup> | ISO 179/1eU         |
| Notched Impact Strength (Charpy, 23°C)  | 20 / -    | kJ/m <sup>2</sup> | ISO 179/1eA         |
| Notched Impact Strength (Charpy, -40°C) | 11 / -    | kJ/m <sup>2</sup> | ISO 179/1eA         |
| <b>Thermal Properties</b>               |           |                   |                     |
| HDT / A (1,8 MPa)                       | 203 / *   | °C                | ISO 75-1/-2         |
| DSC (Melt Point)                        | 223 / *   | °C                | ISO 11357           |
| <b>Electrical Properties</b>            |           |                   |                     |
| Surface Resistance                      | 1E12      | Ohm               | DIN EN<br>62631-3-2 |
| <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                                 | 1420 / -  | kg/m <sup>3</sup> | ISO 1183            |