

## Technical Data Sheet



### ALCOM PA6 900/1 SI3

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Base Polymer           | Polyamide 6                                          |
| Filler/Additive System | 3 % silicone                                         |
| Special Features       | improved sliding / wear, heat stabilised             |
| Market Segment         | Automotive, Machinery                                |
| Application Area       | functional components, bearings and sliding elements |

|                               |                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | in a dry air (dessiccant) dryer <80 °C<br>for 2-12 h<br>dependant on moisture content |
| Processing Injection Moulding | melt temperature 250-270 °C<br>mould temperature 40-80 °C                             |
| Storage                       | dry, protected from light                                                             |

| Properties                              | dry/cond.    | Dimension         | Test Norm   |
|-----------------------------------------|--------------|-------------------|-------------|
| <b>Mechanical Properties</b>            |              |                   |             |
| Flexural Modulus                        | 2700 / -     | MPa               | ISO 178     |
| Flexural Stress (3.5% Strain)           | 80 / -       | MPa               | ISO 178     |
| Tensile Modulus                         | 2600 / -     | MPa               | ISO 527     |
| Tensile Stress at Yield                 | 65 / -       | MPa               | ISO 527     |
| Tensile Elongation at Yield             | 3.9 / -      | %                 | ISO 527     |
| Tensile Elongation at Break             | 25 / -       | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | no break / - | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | no break / - | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 5.5 / -      | 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)                       | 58 / *       | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                        | 221 / *      | °C                | ISO 11357   |
| <b>Rheological Properties</b>           |              |                   |             |
| Shrinkage (lengthwise, 24h)             | 1.6 - 2      | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 1.6 - 2      | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |              |                   |             |
| Density                                 | 1130 / -     | kg/m <sup>3</sup> | ISO 1183    |