

## Technical Data Sheet



### ALCOM PA6 900/1 SI3

(Last update: 04.03.2025)



|                        |                                                      |
|------------------------|------------------------------------------------------|
| 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    |

#### Liability Exclusion

These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions.

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