

## Technical Data Sheet



### ALCOM PA66 910/32.1 GF8 TCE8

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| Base Polymer           | Polyamide 66                                               |
| Filler/Additive System | special filler,8 % glass fibres                            |
| Special Features       | thermal conductive,electrically conductive,heat stabilised |
| Market Segment         | Automotive,Machinery,electrical and electronic,Lighting    |
| Application Area       | electrical components,radiator systems,cooling system      |
| Typical Applications   | housings,functional components                             |

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | 130 °C in a dry air (dessiccant) dryer<br>for 2-4 h<br>max. moisture content <0,12 % |
| Processing Injection Moulding | melt temperature 300-320 °C<br>mould temperature 100-130 °C                          |
| Storage                       | dry, protected from light                                                            |

| Properties                                   | dry/cond. | Dimension         | Test Norm      |
|----------------------------------------------|-----------|-------------------|----------------|
| <b>Mechanical Properties</b>                 |           |                   |                |
| Flexural Modulus                             | 11700 / - | MPa               | ISO 178        |
| Flexural Strength                            | 88 / -    | MPa               | ISO 178        |
| Tensile Modulus                              | 10400 / - | MPa               | ISO 527        |
| Tensile Strength at Break                    | 53 / -    | MPa               | ISO 527        |
| Tensile Elongation at Break                  | 0.7 / -   | %                 | ISO 527        |
| Impact Strength (Charpy, 23°C)               | 6 / -     | kJ/m <sup>2</sup> | ISO 179/1eU    |
| Notched Impact Strength (Charpy, 23°C)       | 2 / -     | kJ/m <sup>2</sup> | ISO 179/1eA    |
| <b>Thermal Properties</b>                    |           |                   |                |
| HDT / A (1,8 MPa)                            | 245 / *   | °C                | ISO 75-1/-2    |
| DSC (Melt Point)                             | 262 / *   | °C                | ISO 11357      |
| Coeff. of Linear Therm. Expansion (parallel) | 2 / *     | E-6/K             | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion (normal)   | 0.52 / *  | E-6/K             | ISO 11359-1/-2 |
| Thermal Conductivity (Integral)              | 8.0       | W/(m K)           | ISO 22007-2    |
| Thermal Conductivity (in-plane)              | 18.0      | W/(m K)           | ASTM E 1461    |
| Thermal Conductivity (through-plane)         | 5.0       | W/(m K)           | ASTM E 1461    |
| Specific Heat Capacity                       | 1.5       | J/(g K)           | -              |
| <b>Electrical Properties</b>                 |           |                   |                |
| Surface Resistance                           | * / 150   | Ohm               | IEC 62631-3-2  |
| <b>Rheological Properties</b>                |           |                   |                |
| Shrinkage (lengthwise, 24h)                  | 0.3 - 0.5 | %                 | ISO 294-4      |
| Shrinkage (lateral, 24h)                     | 0.3 - 0.5 | %                 | ISO 294-4      |

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(Last update: 17.04.2023)

#### Physical Properties

|         |          |                   |          |
|---------|----------|-------------------|----------|
| Density | 1510 / - | kg/m <sup>3</sup> | ISO 1183 |
|---------|----------|-------------------|----------|

#### Flammability

|                                 |         |       |              |
|---------------------------------|---------|-------|--------------|
| Flammability (3.0 mm)           | V-0 / * | class | UL 94        |
| Glow Wire (GWFI, 960 °C, 1.0mm) | passed  | -     | DIN EN 60695 |