



## ALTECH PA6 A 1000/149 FR

(Last update: 22.02.2024)



|                      |                                                                                        |
|----------------------|----------------------------------------------------------------------------------------|
| Base Polymer         | Polyamide 6                                                                            |
| Colour               | natural color,black                                                                    |
| Special Features     | flame retardant,halogen-free flame retardant,heat stabilised,easy release (demoulding) |
| Market Segment       | Automotive,electrical and electronic,Machinery                                         |
| Application Area     | injection moulded parts,exterior parts,electrical components                           |
| Typical Applications | housings,different automotive powertrain parts,functional components                   |

Pre-Drying Conditions 80 °C in a dry air (dessiccant) dryer for 2-12 h  
dependant on moisture content  
max. moisture content <0,15 %

Processing Injection Moulding melt temperature 250-270 °C  
mould temperature 60-100 °C

Storage dry, protected from light

| Properties                              | dry/cond. | Dimension         | Test Norm   |
|-----------------------------------------|-----------|-------------------|-------------|
| <b>Mechanical Properties</b>            |           |                   |             |
| Flexural Modulus                        | 3100 / -  | MPa               | ISO 178     |
| Flexural Stress (3.5% Strain)           | 95 / -    | MPa               | ISO 178     |
| Tensile Modulus                         | 3400 / -  | MPa               | ISO 527     |
| Tensile Stress at Yield                 | 75 / -    | MPa               | ISO 527     |
| Tensile Elongation at Yield             | 3.5 / -   | %                 | ISO 527     |
| Tensile Elongation at Break             | 10 / -    | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 65 / -    | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 65 / -    | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 3.5 / -   | 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)                       | 70 / *    | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                        | 220 / *   | °C                | ISO 11357   |
| <b>Rheological Properties</b>           |           |                   |             |
| Shrinkage (lengthwise, 24h)             | 1 - 1.2   | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 1.2 - 1.4 | %                 | ISO 294-4   |
| <b>Physical Properties</b>              |           |                   |             |
| Density                                 | 1170 / -  | kg/m <sup>3</sup> | ISO 1183    |



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### Flammability

|                                 |         |       |              |
|---------------------------------|---------|-------|--------------|
| Flammability (1.5 mm)           | V-0 / * | class | UL 94        |
| Yellow Card available           | yes / * | -     | -            |
| Glow Wire (GWFI, 960 °C, 1.0mm) | passed  | -     | DIN EN 60695 |
| Glow Wire (GWFI, 960 °C, 2.0mm) | passed  | -     | DIN EN 60695 |
| Glow Wire (GWIT, 775 °C, 2.0mm) | passed  | -     | DIN EN 60695 |
| Glow Wire (GWIT, 875 °C, 1.0mm) | passed  | -     | DIN EN 60695 |

### 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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