

## Technical Data Sheet



## ALCOM PA6 900/1 GF30 WT1165-10LB

|                        |                                                                      |
|------------------------|----------------------------------------------------------------------|
| Base Polymer           | Polyamide 6                                                          |
| Filler/Additive System | 30 % glass fibres                                                    |
| Special Features       | highly reflective, opaque, slip agent                                |
| Market Segment         | Automotive, various                                                  |
| Application Area       | lighting, light blocking components, interior decoration / finishing |
| Typical Applications   | light guides, reflectors, handles                                    |

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

Processing Injection Moulding      melt temperature 270-290 °C  
mould temperature 80-100 °C

Storage      dry, protected from light

| Properties                                    | dry/cond.   | Dimension         | Test Norm   |
|-----------------------------------------------|-------------|-------------------|-------------|
| <b>Mechanical Properties</b>                  |             |                   |             |
| Flexural Modulus                              | 8700 / 4700 | MPa               | ISO 178     |
| Flexural Strength                             | 185 / 105   | MPa               | ISO 178     |
| Tensile Modulus                               | 9400 / 4800 | MPa               | ISO 527     |
| Tensile Strength at Break                     | 122 / 65    | MPa               | ISO 527     |
| Tensile Elongation at Break                   | 2 / 4       | %                 | ISO 527     |
| Impact Strength (Charpy, 23°C)                | 39 / 50     | kJ/m <sup>2</sup> | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)               | 36 / -      | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)        | 5 / 8.5     | 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)                             | 205 / *     | °C                | ISO 75-1/-2 |
| DSC (Melt Point)                              | 220 / *     | °C                | ISO 11357   |
| <b>Rheological Properties</b>                 |             |                   |             |
| Shrinkage (lengthwise, 24h)                   | 0.1 - 0.3   | %                 | ISO 294-4   |
| Shrinkage (lateral, 24h)                      | 0.6 - 0.8   | %                 | ISO 294-4   |
| <b>Physical Properties</b>                    |             |                   |             |
| Density                                       | 1420 / -    | kg/m <sup>3</sup> | ISO 1183    |
| <b>Optical Properties</b>                     |             |                   |             |
| Tristimulus Value Y10 of Reflection (d=2,0mm) | 84          | %                 | DIN 5033    |
| Tristimulus Value Y10 of Transm., d=0.5mm     | 0.8         | %                 | ISO 13468   |