

## Technical Data Sheet



### ALTECH PC ECO 1000/121 UV IM

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| Base Polymer         | Polycarbonate                                                    |
| Special Features     | impact modified,UV stabilised,contains recycled material         |
| Market Segment       | electrical and electronic,Lighting,various                       |
| Application Area     | exterior parts,fixtures / fittings,electrical components,various |
| Typical Applications | housings,lamps,sockets,various                                   |

|                       |                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions | 120 °C in a dry air (dessiccant) dryer<br>for 2-3 h<br>120 °C in an air circulating dryer<br>for 4-12 h<br>dependant on moisture content<br>max. moisture content <0,02 % |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| Processing Injection Moulding | melt temperature 270-310 °C<br>mould temperature 80-110 °C |
|-------------------------------|------------------------------------------------------------|

|         |                           |
|---------|---------------------------|
| Storage | dry, protected from light |
|---------|---------------------------|

| Properties                             | Value     | Dimension                 | Test Norm        |
|----------------------------------------|-----------|---------------------------|------------------|
| <b>Mechanical Properties</b>           |           |                           |                  |
| Tensile Modulus                        | 2300      | MPa                       | ISO 527          |
| Tensile Stress at Yield                | 61        | MPa                       | ISO 527          |
| Tensile Elongation at Yield            | 5.5       | %                         | ISO 527          |
| Tensile Elongation at Break            | 65        | %                         | ISO 527          |
| Impact Strength (Charpy, 23°C)         | no break  | kJ/m <sup>2</sup>         | ISO 179/1eU      |
| Notched Impact Strength (Charpy, 23°C) | 50        | kJ/m <sup>2</sup>         | ISO 179/1eA      |
| <b>Thermal Properties</b>              |           |                           |                  |
| Vicat B50                              | 140       | °C                        | ISO 306          |
| <b>Rheological Properties</b>          |           |                           |                  |
| Melt Index (MVR)                       | 15        | cm <sup>3</sup> /10min    | ISO 1133         |
| MVR temperature                        | 300       | °C                        | -                |
| MVR load                               | 1.2       | kg                        | -                |
| Shrinkage (24h)                        | 0.5 - 0.8 | %                         | ISO 294-4        |
| <b>Physical Properties</b>             |           |                           |                  |
| Density                                | 1200      | kg/m <sup>3</sup>         | ISO 1183         |
| <b>Ecological Properties</b>           |           |                           |                  |
| Global Warming Potential (GWP)         | 0.47      | kg CO <sub>2</sub> eq./kg | ISO 14040, 14044 |
| <b>Flammability</b>                    |           |                           |                  |
| Flammability (1.5 mm)                  | V-2       | class                     | UL 94            |
| Glow Wire (GWFI, 850 °C, 2.0mm)        | passed    | -                         | DIN EN 60695     |