

## Technical Data Sheet



### ALTECH PP-H A 2040/652 GF 40 UV CP

|                        |                                                                               |
|------------------------|-------------------------------------------------------------------------------|
| Base Polymer           | Polypropylene Homopolymer                                                     |
| Filler/Additive System | 40 % glass fibres                                                             |
| Colour                 | grey                                                                          |
| Special Features       | chemically coupled, UV stabilised, easy release (demoulding), heat stabilised |
| Market Segment         | Machinery, building and construction                                          |
| Application Area       | injection moulded parts, clothing / fasteners, gardening tools                |
| Typical Applications   | housings, functional components                                               |

|                       |                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions | in a dry air (dessiccant) dryer 80-120 °C<br>for 2-3 h<br>in an air circulating dryer 80-120 °C<br>for 2-4 h<br>dependant on moisture content<br>max. moisture content <0,10 % |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Processing Injection Moulding | melt temperature 200-250 °C<br>mould temperature 20-70 °C |
|-------------------------------|-----------------------------------------------------------|

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

| Properties                              | Value     | Dimension              | Test Norm   |
|-----------------------------------------|-----------|------------------------|-------------|
| <b>Mechanical Properties</b>            |           |                        |             |
| Flexural Modulus                        | 7900      | MPa                    | ISO 178     |
| Flexural Strength                       | 135       | MPa                    | ISO 178     |
| Tensile Modulus                         | 8600      | MPa                    | ISO 527     |
| Tensile Strength at Break               | 90        | MPa                    | ISO 527     |
| Tensile Elongation at Break             | 2.9       | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 50        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 40        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 10        | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 7         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                        |             |
| Vicat B50                               | 135       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                       | 142       | °C                     | ISO 75-1/-2 |
| DSC (Melt Point)                        | 163       | °C                     | ISO 11357   |
| <b>Rheological Properties</b>           |           |                        |             |
| Melt Index (MVR)                        | 2.6       | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                         | 230       | °C                     | -           |
| MVR load                                | 2.16      | kg                     | -           |
| Shrinkage (lengthwise, 24h)             | 0.2 - 0.4 | %                      | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 0.3 - 0.5 | %                      | ISO 294-4   |
| <b>Physical Properties</b>              |           |                        |             |
| Density                                 | 1230      | kg/m <sup>3</sup>      | ISO 1183    |