

## Technical Data Sheet



### ALTECH PP-H A 4940/100 MR40

|                        |                                                        |
|------------------------|--------------------------------------------------------|
| Base Polymer           | Polypropylene Homopolymer                              |
| Filler/Additive System | 40 % talcum                                            |
| Colour                 | black,natural color                                    |
| Special Features       | easy release (demoulding),slip agent,heat stabilised   |
| Market Segment         | Automotive,building and construction                   |
| Application Area       | interior decoration / finishing,gardening tools        |
| Typical Applications   | injection moulded parts,functional components,housings |

|                       |                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                       | 4800      | MPa                    | ISO 178     |
| Flexural Strength                      | 55        | MPa                    | ISO 178     |
| Tensile Modulus                        | 4900      | MPa                    | ISO 527     |
| Tensile Stress at Yield                | 34        | MPa                    | ISO 527     |
| Tensile Elongation at Yield            | 2.7       | %                      | ISO 527     |
| Tensile Elongation at Break            | 6.3       | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)         | 26        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C) | 3         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>              |           |                        |             |
| Vicat B50                              | 100       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                      | 95        | °C                     | ISO 75-1/-2 |
| DSC (Melt Point)                       | 169       | °C                     | ISO 11357   |
| <b>Rheological Properties</b>          |           |                        |             |
| Melt Index (MVR)                       | 3.5       | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                        | 230       | °C                     | -           |
| MVR load                               | 2.16      | kg                     | -           |
| Shrinkage (lengthwise, 24h)            | 1 - 1.2   | %                      | ISO 294-4   |
| Shrinkage (lateral, 24h)               | 0.5 - 0.7 | %                      | ISO 294-4   |
| <b>Physical Properties</b>             |           |                        |             |
| Density                                | 1230      | kg/m <sup>3</sup>      | ISO 1183    |