

## Technical Data Sheet

❖ Altech NXT PP®

MOCOM

## ALTECH NXT PP-H A 2050/456.02 GF50 CP

|                        |                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------|
| Base Polymer           | Polypropylene Homopolymer                                                                          |
| Filler/Additive System | 50 % glass fibres                                                                                  |
| Colour                 | black,natural color                                                                                |
| Special Features       | chemically coupled,high heat stabilised,high stiffness,high toughness,low emission,heat stabilised |
| Market Segment         | Automotive                                                                                         |
| Typical Applications   | various,injection moulded parts                                                                    |

|                               |                                                                                                                                                                                |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | in an air circulating dryer 80-120 °C<br>for 2-4 h<br>in a dry air (dessiccant) dryer 80-120 °C<br>for 2-3 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                        | 11200     | MPa                    | ISO 178     |
| Flexural Strength                       | 175       | MPa                    | ISO 178     |
| Tensile Modulus                         | 12000     | MPa                    | ISO 527     |
| Tensile Strength at Break               | 115       | MPa                    | ISO 527     |
| Tensile Elongation at Break             | 2.5       | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 48        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 45        | 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) | 9         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                        |             |
| Vicat B50                               | 146       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                       | 158       | °C                     | ISO 75-1/-2 |
| DSC (Melt Point)                        | 166       | °C                     | ISO 11357   |
| <b>Rheological Properties</b>           |           |                        |             |
| Melt Index (MVR)                        | 2         | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                         | 230       | °C                     | -           |
| MVR load                                | 2.16      | kg                     | -           |
| Shrinkage (lengthwise, 24h)             | 0.1 - 0.3 | %                      | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 0.4 - 0.6 | %                      | ISO 294-4   |
| Spiral Flow (2 mm wall thickness)       | 60        | cm                     | -           |
| <b>Physical Properties</b>              |           |                        |             |
| Density                                 | 1340      | kg/m <sup>3</sup>      | ISO 1183    |