

## Technical Data Sheet



## ALCOM CFX PBT 1000 16072

|                      |                                                                         |
|----------------------|-------------------------------------------------------------------------|
| Base Polymer         | Polybutylene Terephthalate                                              |
| Special Features     | metallic effect                                                         |
| Market Segment       | electrical and electronic, building and construction, sport and leisure |
| Application Area     | injection moulded parts                                                 |
| Typical Applications | housings, bezels                                                        |

|                       |                                                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions | in a dry air (dessiccant) dryer 100-120 °C<br>for 2-4 h<br>in an air circulating dryer 100-120 °C<br>for 4-8 h<br>dependant on moisture content |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| Processing Injection Moulding | melt temperature 250-270 °C<br>mould temperature 60-100 °C |
|-------------------------------|------------------------------------------------------------|

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

| Properties                              | Value     | Dimension              | Test Norm   |
|-----------------------------------------|-----------|------------------------|-------------|
| <b>Mechanical Properties</b>            |           |                        |             |
| Flexural Modulus                        | 2600      | MPa                    | ISO 178     |
| Flexural Stress (3.5% Strain)           | 75        | MPa                    | ISO 178     |
| Tensile Modulus                         | 2500      | MPa                    | ISO 527     |
| Tensile Stress at Yield                 | 55        | MPa                    | ISO 527     |
| Tensile Elongation at Yield             | 10        | %                      | ISO 527     |
| Tensile Elongation at Break             | 18        | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 75        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 65        | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 4         | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 3.5       | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>               |           |                        |             |
| Vicat B50                               | 182       | °C                     | ISO 306     |
| HDT / A (1,8 MPa)                       | 54        | °C                     | ISO 75-1/-2 |
| DSC (Melt Point)                        | 223       | °C                     | ISO 11357   |
| <b>Rheological Properties</b>           |           |                        |             |
| Melt Index (MVR)                        | 12        | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                         | 250       | °C                     | -           |
| MVR load                                | 2.16      | kg                     | -           |
| Shrinkage (lengthwise, 24h)             | 2.1 - 2.5 | %                      | ISO 294-4   |
| Shrinkage (lateral, 24h)                | 1.9 - 2.3 | %                      | ISO 294-4   |
| <b>Physical Properties</b>              |           |                        |             |
| Density                                 | 1280      | kg/m <sup>3</sup>      | ISO 1183    |