

## Technical Data Sheet



### ALCOM MED PS 1000 14113

|                      |                         |
|----------------------|-------------------------|
| Base Polymer         | Polystyrene, impact     |
| Market Segment       | Medical / Personal Care |
| Application Area     | injection moulded parts |
| Typical Applications | housings                |

|                               |                                                                                                                                             |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | in a dry air (dessiccant) dryer 60-80 °C<br>for 2-3 h<br>in an air circulating dryer 60-80 °C<br>for 2-3 h<br>dependant on moisture content |
| Processing Injection Moulding | melt temperature 180-260 °C<br>mould temperature 10-70 °C                                                                                   |
| Storage                       | dry, protected from light                                                                                                                   |
| Minimum Shelf Life            | months <12                                                                                                                                  |

| Properties                             | Value     | Dimension              | Based on Test Norm |
|----------------------------------------|-----------|------------------------|--------------------|
| <b>Mechanical Properties</b>           |           |                        |                    |
| Flexural Modulus                       | 2250      | MPa                    | ISO 178            |
| Flexural Stress (3.5% Strain)          | 39        | MPa                    | ISO 178            |
| Tensile Modulus                        | 2200      | MPa                    | ISO 527            |
| Tensile Stress at Yield                | 25        | MPa                    | ISO 527            |
| Tensile Elongation at Yield            | 1.2       | %                      | ISO 527            |
| Tensile Elongation at Break            | 16        | %                      | ISO 527            |
| Impact Strength (Charpy, 23°C)         | 30        | kJ/m <sup>2</sup>      | ISO 179/1eU        |
| Impact Strength (Charpy, -40°C)        | 25        | kJ/m <sup>2</sup>      | ISO 179/1eU        |
| Notched Impact Strength (Charpy, 23°C) | 6         | kJ/m <sup>2</sup>      | ISO 179/1eA        |
| <b>Thermal Properties</b>              |           |                        |                    |
| Vicat B50                              | 81        | °C                     | ISO 306            |
| HDT / A (1,8 MPa)                      | 76        | °C                     | ISO 75-1/-2        |
| <b>Rheological Properties</b>          |           |                        |                    |
| Melt Index (MVR)                       | 14        | cm <sup>3</sup> /10min | ISO 1133           |
| MVR temperature                        | 200       | °C                     | -                  |
| MVR load                               | 5         | kg                     | -                  |
| Shrinkage (24h)                        | 0.3 - 0.6 | %                      | ISO 294-4          |
| <b>Physical Properties</b>             |           |                        |                    |
| Density                                | 1030      | kg/m <sup>3</sup>      | ISO 1183           |

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(Last update: 10.01.2022)

Flammability

|                                |        |       |              |
|--------------------------------|--------|-------|--------------|
| Flammability (1.5 mm)          | HB     | class | UL 94        |
| Glow Wire (GWFI, 650°C, 1.0mm) | passed | -     | DIN EN 60695 |
| Glow Wire (GWFI, 650°C, 2.0mm) | passed | -     | DIN EN 60695 |