

| Properties                          | Standard                           | Unit                | Dexnyl©<br>PEEK + 30%<br>Carbon-fiber |
|-------------------------------------|------------------------------------|---------------------|---------------------------------------|
| Density                             | ISO 1183                           | g/cm <sup>3</sup>   | 1.4 +/- 0.01                          |
| Water Abs. (25°C 24h)               | ISO 62                             | %                   | 0,06                                  |
| Mold shrinking<br>percentage        | 3mm, 170°C, Flow<br>direction      | %                   | 0.1                                   |
|                                     | Perpendicular to flow<br>direction | %                   | 0,5                                   |
| Melting Point                       | DSC                                | °C                  | 343                                   |
| Distortion Temperature              | ASTM D648                          | °C                  | 315                                   |
| Continuous Using<br>Temperature     | UL 74685                           | °C                  | 260                                   |
| Coefficient of thermal<br>expansion | ASTM D696                          | 10 <sup>-5</sup> °C | 1.5                                   |
| Tensile strength (23°C)             | ISO527-2/1B/50                     | Mpa                 | 220                                   |
| Tensile elongation<br>(23°C)        | ISO527-2/1B/50                     | %                   | 1.8                                   |
| Bending strength<br>(23°C)          | ISO 178                            | Mpa                 | 298                                   |
| Compressive strength<br>(23°C)      | ASTM D695                          | Mpa                 | 240                                   |
| Lzod impact strength<br>(no gap)    | ISO 180/U                          | kJm <sup>-2</sup>   | 46                                    |
| Rockwell hardness                   | ASTM D785                          | HRR                 | 107                                   |
| Flammable level                     | UL 94                              | V-0@mm              | 1.5                                   |
| Surface resistivity                 |                                    | Ω                   | 3x10 <sup>6</sup>                     |
| Friction coefficient                |                                    | μ                   | 0.28                                  |

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The specified values are established from average values of several tests and they correspond to our today's knowledge. They are only to be used as information about our products and as help for the material selection. With these values, we do not ensure specific properties, or the suitability for certain application, therefore we do not assume any legal responsibility for an improper usage. The used test pieces have been machined from extruded semi-finished material. Since the plastic properties depend on the manufacturing process (extrusion, injection moulding), on the dimensions of the semi finished material and on the degree of crystallinity, the actual properties of a specific product may slightly deviate from the tested ones. For information about divergent properties do not hesitate to contact us. On request we advise you regarding the most appropriate component design and the definition of material specifications more suitable to your application data. Notwithstanding, the customer bears all the responsibility for the thorough examination of suitability, efficiency, efficacy and safety of the chosen products in pharmaceutical applications, medical devices or other end uses. Status: July 2020