

**东莞市明德塑胶制品有限公司**  
**DONGGUAN MINDE PLASTIC PRODUCTS CO., LTD**  
**物 性 表**  
**Property data sheet**

产品名称 product name: PEEK树脂 (本、黑)

| 性能指标<br>Properties                                      | 测试标准<br>Standard     | 测试条件<br>Test method | 单位<br>Unit                      | 测试数据<br>Test Data        |
|---|----------------------|---------------------|---------------------------------|--------------------------|
| <b>物理性能 Physical Properties</b>                         |                      |                     |                                 |                          |
| 密度 Specific gravity                                     | ASTM D792/ISO 1183   | —                   | g/cm <sup>3</sup>               | -/1.3 (结晶)<br>1.26 (非结晶) |
| 吸水率 Water absorption                                    | ASTM D570/ISO 62     | 23°C/50 RH<br>空气中   | %                               | -/0.07 (3.2mm厚<br>拉伸棒)   |
| 吸水率 Water absorption                                    | ASTM D570/ISO 62     | 23°C/水中浸透           | %                               | -/0.4 (3.2mm厚拉           |
| <b>热性能 Thermal property</b>                             |                      |                     |                                 |                          |
| 熔点 fusing points  | ASTM D3418/ISO 11357 | —                   | °C                              | -/343                    |
| 最高使用温度 Maximum service temperature                      | 短时                   |                     | °C                              | 310                      |
| 最高使用温度 Maximum service temperature                      | 连续: 5000/20000       |                     | °C                              | -/250                    |
| 最低使用温度 Minimum allowable temperature                    | —                    | —                   | °C                              | —                        |
| 热膨胀系数 Coefficient of thermal expansion                  | ASTM E831/ISO 11359  | 23-100°C之间的平均值      | 1/°C                            | -/0.5×10 <sup>-4</sup>   |
| 热膨胀系数 Coefficient of thermal expansion                  | ASTM E831/ISO 11359  | 23-150°C之间的平均值      | 1/°C                            | -/0.5×10 <sup>-4</sup>   |
| 热变形温度 Temperature of deflection under load              | ASTM D648/ISO 75     | 264psi/1.8Mpa       | °C                              | -/152                    |
| 维卡软化温度<br>Vicat softening temperature                   | ASTM D1525/ISO 306   | VST/B/50            | °C                              | -/250                    |
| 玻璃化温度 Glass transition temperature                      | ASTM D3418/ISO 11357 | —                   | °C                              | -/143                    |
| <b>机械性能 Mechancial Properties</b>                       |                      |                     |                                 |                          |
| 拉伸强度<br>Tensile strength at break                       | ASTM D638/ISO 527    | 屈服 10mm/min         | Mpa                             | -/100                    |
| 断裂伸长率 Strain at Break                                   | ASTM D638/ISO 527    | 断裂 10mm/min         | %                               | -/45                     |
| 拉伸模量 Tensile modulus                                    | ASTM D638/ISO 527    | —                   | Mpa                             | -/4200                   |
| 弯曲强度<br>Flexural strength                               | ASTM D790/ISO 178    | 2mm/min             | Mpa                             | -/165                    |
| 弯曲模量 Flexural modulus                                   | ASTM D790/ISO 178    | 2mm/min             | Mpa                             | -/4100                   |
| 悬臂梁缺口冲击强度 Izod notched impact strength                  | ASTM D256/ISO 180    | 1eA/23°C            | (J/m) /<br>(KJ/m <sup>2</sup> ) | -/7.5                    |
| 简支梁缺口冲击强度 Simply supported beam Notched Impact Strength | ASTM D256/ISO 179    | 1eA/23°C            | (J/m) /<br>(KJ/m <sup>2</sup> ) | -/7                      |
| 洛氏硬度<br>Rockwell hardness                               | ASTM D785/ISO 2039   | 23°C                | Mpa/-                           | —                        |
| 邵氏硬度<br>Shore hardness                                  | ASTM D2240/ISO 868   | 23°C                | —                               | -/85                     |

| 电性能 Electric properties  |                     |                     |        |                               |
|--|---------------------|---------------------|--------|-------------------------------|
| 介电常数<br>Dielectric constant  | ASTM D150/IEC 60250 | 1mHZ/23°C<br>/50 RH | —      | -/3.1 (1kHz)                  |
| 介质损耗因数 Dielectric<br>dissipation factor  | ASTM D150/IEC 60250 | 1mHZ/23°C<br>/50 RH | —      | -/0.004                       |
| 介电强度<br>Dielectric strength  | ASTM D149/IEC 60243 | 23°C/50 RH          | KV/mm  | -/23 (2mm)                    |
| 表面电阻率<br>Sheet resistivity   | ASTM D257/IEC 60093 | 23°C/50 RH          | Ω      | -/≥10 <sup>15</sup>           |
| 体积电阻率<br>Volume resistivity  | ASTM D257/IEC 60093 | 23°C/50 RH          | Ω · cm | -/10 <sup>16</sup> (23°C, 1V) |
| 燃烧性能 Flammability  | UL94                | 3mm                 | —      | V-0                           |
| 说明: 以上所有测试数据均为本公司实验室设备测出现场数据, 因设备与机器区别, 实际应用略有误差, 仅供参考.  |                     |                     |        |                               |
| ote: all the above test data are measured by the laboratory equipment of our company. Due to the differences between |                     |                     |        |                               |