

PEEK/板材

物性表 Property Date

| 材料性能<br>Material Properties               | 条件<br>Condition                     | 试验方法<br>Test Method | 单位<br>Unit                         | PEEK<br>板材           |
|-------------------------------------------|-------------------------------------|---------------------|------------------------------------|----------------------|
| 机械性能 Mechanical Date                      |                                     |                     |                                    |                      |
| 拉伸强度<br>Tensile Strength                  | 23℃                                 | ISO 527             | MPa                                | 90                   |
| 断裂伸长率<br>Tensile Elongation               | 23℃                                 | ISO 527             | %                                  | 15                   |
| 拉伸模量<br>Tensile Modulus                   | 23℃                                 | ISO 527             | GPa                                | 3.6                  |
| 弯曲强度<br>Flexural Strength                 | 23℃                                 | ISO 178             | MPa                                | 135                  |
| 弯曲模量<br>Flexural Modulus                  | 23℃                                 | ISO 178             | GPa                                | 3.6                  |
| 简支梁冲击强度<br>Charpy Impact Strength         | 23℃， 有缺口<br>Notched 23℃             | ISO 179/1eA         | KJ×m <sup>-2</sup>                 | 6.0                  |
| 热性能 Thermal Date                          |                                     |                     |                                    |                      |
| 熔点<br>Melting Point                       |                                     | ISO 11357           | ℃                                  | 334                  |
| 玻璃化温度<br>Glass Transition                 |                                     | ISO 11357           | ℃                                  | 143                  |
| 热膨胀系数<br>Coefficient of Thermal Expansion | 温度低于 Tg 平均值<br>Temperature Below Tg | ISO 11359           | ppm×℃ <sup>-1</sup>                | 50                   |
|                                           | 温度高于 Tg 平均值<br>Temperature Above Tg | ISO 11359           | ppm×℃ <sup>-1</sup>                | 100                  |
| 热变形温度<br>Heat Deflection Temperature      | 1.8MPa                              | ISO 75              | ℃                                  | 150                  |
| 导热系数<br>Thermal Conductivity              | 23℃                                 | ISO/CD22007-4       | W×m <sup>-1</sup> ×℃ <sup>-1</sup> | --                   |
| 物理性能 Miscellaneous                        |                                     |                     |                                    |                      |
| 密度<br>Density                             | 结晶<br>Crystalline                   | ISO 1183            | g×cm <sup>-3</sup>                 | 1.30                 |
| 熔体粘度<br>Melting Index                     | 400℃ 1000s <sup>-1</sup>            | ISO 11443           | Pa·s                               | 530                  |
| 邵氏硬度<br>Shore D Hardness                  | 23℃                                 | ISO 868             | D                                  | 82                   |
| 吸水率<br>Water Absorption                   | 24h， 23℃                            | ISO 62-1            | %                                  | 0.3                  |
| 表面电阻率<br>Surface Resistivity              | 23℃                                 | GB/T 31838.3        | Ω                                  | 1.0*10 <sup>15</sup> |
| 体积电阻率<br>Volume Resistivity               | 23℃                                 | IEC 60093           | Ω·cm                               | 10 <sup>15</sup>     |

|                               |      |              |       |     |
|-------------------------------|------|--------------|-------|-----|
| 电气强度<br>Dielectrical Strength | 23℃  | IEC 60243- 1 | kv/mm | 16  |
| 成型收缩率<br>Mould Shrinkage Rate | 平行流动 | ISO 294-4    | ‰     | 3   |
|                               | 垂直流动 | ISO 294-4    | ‰     | 5   |
| 易燃性等级<br>Flammability Rating  |      | UL 94        |       | V-0 |