

VESTAKEEP® 4000 FP
 PEEK

Evonik Operations GmbH

Unreinforced, high-viscosity polyether ether ketone fine powder

VESTAKEEP® 4000 FP is an unreinforced, highviscosity polyether ether ketone fine powder. It can be used as a basic resin or in blends with different additives for manufacturing compression molding parts.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP® 4000 FP is of low flammability.

VESTAKEEP® 4000 FP is supplied as powder in boxes with moisture-proof polyethyleneliners.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30°C.

Pigmentation may affect values.

For guidance processing of VESTAKEEP® 4000 FP please follow the general recommendations in our brochure "VESTAKEEP® High Performance in Powder Form Polyether Ether Ketone Powders".

The values presented are typical or average values, they do not constitute a specification.

| 流变性能 | 数值 | 单位 | 试验方法 |
|---------------|-----|------------------------|----------|
| ISO数据 | | | |
| 熔体体积流动速度, MVR | 11 | cm ³ /10min | ISO 1133 |
| 温度 | 380 | °C | - |
| 载荷 | 5 | kg | - |

| 机械性能 | 数值 | 单位 | 试验方法 |
|-------------------|------|-------------------|-------------|
| ISO数据 | | | |
| 拉伸模量 | 3500 | MPa | ISO 527 |
| 屈服应力 | 96 | MPa | ISO 527 |
| 屈服伸长率 | 5 | % | ISO 527 |
| 名义断裂伸长率 | 30 | % | ISO 527 |
| 无缺口简支梁冲击强度, +23°C | 无断裂 | kJ/m ² | ISO 179/1eU |
| 无缺口简支梁冲击强度, -30°C | 无断裂 | kJ/m ² | ISO 179/1eU |
| 简支梁缺口冲击强度, +23°C | 7 | kJ/m ² | ISO 179/1eA |
| Type of failure | C | - | - |
| 简支梁缺口冲击强度, -30°C | 6 | kJ/m ² | ISO 179/1eA |
| Type of failure | C | - | - |

| 热性能 | 数值 | 单位 | 试验方法 |
|--------------------|-----|----|----------------|
| ISO数据 | | | |
| 熔融温度, 10°C/min | 340 | °C | ISO 11357-1/-3 |
| 热变形温度, 1.80 MPa | 150 | °C | ISO 75-1/-2 |
| 热变形温度, 0.45 MPa | 205 | °C | ISO 75-1/-2 |
| 维卡软化温度, 50°C/h 50N | 305 | °C | ISO 306 |

| 其它性能 | 数值 | 单位 | 试验方法 |
|--------------|------|-------------------|----------|
| ISO数据 | | | |
| 密度 | 1300 | kg/m ³ | ISO 1183 |

特征
加工方法

模压/烧结成型, 模压成型

特征

共混树脂

供货形式

粉料

耐化学试剂

通用耐化学性