VESTAKEEP® 2000G
Medium-viscosity, unreinforced polyether ether ketone

VESTAKEEP 2000G is a medium-viscosity, unreinforced polyether ether ketone for injection molding.

The semi-crystalline polymer features superior thermal and chemical resistance. Parts made from VESTAKEEP 2000G are self-extinguishing.

VESTAKEEP 2000G can be processed by common injection molding machines for thermoplastics.

We recommend a melt temperature between 360°C and 380°C during the injection molding process. The mold temperature should be within a range of 160°C to 200°C, preferably 180°C.

VESTAKEEP 2000G is supplied as granules in 25 kg boxes with moisture-proof polyethylene liners.

For information about processing VESTAKEEP 2000G, please follow the general recommendations in our brochure “VESTAKEEP Polyether Ether Ketone.”

For further information, please contact us at evonik–hp@evonik.com.
**Property** | **Test method** | **Unit** | **VESTAKEEP 2000G**
---|---|---|---
Density | 23°C ISO 1183 DIN EN ISO 1183 | g/cm³ | 1.30
Tensile test | ISO 527-1 DIN EN ISO 527-1 | MPa | 100
| ISO 527-2 DIN EN ISO 527-2 | % | 5
| ISO 527-1 DIN EN ISO 527-1 | % | 30
| ISO 527-2 DIN EN ISO 527-2 | MPa | 3700
CHARPY impact strength | ISO 179/1eU DIN EN ISO 179/1eU | kJ/m² | N
| 23°C –30°C | N²
CHARPY notched impact strength | ISO 179/1eA DIN EN ISO 179/1eA | kJ/m² | 6 C
| 23°C –30°C | 6 C²
Vicat softening temperature | ISO 306 DIN EN ISO 306 | °C | 335
Method A 10 N | °C | 310
Method B 50 N | | |
Linear thermal expansion | ISO 11359 DIN 53752 | 10⁻⁴K⁻¹ | 0.6
| 23–55°C longitudinal | |
Relative permittivity | IEC 60250 DIN VDE 0303–T4 | 50 Hz | 2.8
| 1 MHz | 2.8
Electric strength | K20/P50 IEC 60243–1 IEC 60243–1 | kV/mm | 16
Comparative tracking index | IEC 60112 | Test solution A CTI | 200
| 100 drops value | 175
Volume resistivity | IEC 60093 DIN IEC 60093 | Ohm · cm | 10¹⁵
Surface resistivity | IEC 60093 DIN IEC 60093 | Ohm | 10¹⁴
Melting range | ISO 11357 | °C | approx. 340
DSC 2nd heating | |
Melt volume-flow rate (MVR) | ISO 1133 DIN EN ISO 1133 | cm³/10 min | 70
380°C/ 5kg | |
Flammability acc. UL94 | IEC 60695 UL94 | |
3.2 mm | V–0
Glow wire test | IEC 60695–2–12/13 DIN EN 60695–2–12/13 | °C | 800
GWIT 2 mm | °C | 960
GWFI 2 mm | |
Mold shrinkage | determined on 2 mm sheets | % | 1.1
in flow direction with film gate at rim | |
in transverse direction mold temperature 180°C ISO 294-4 | % | 1.1
Pigmentation may affect values.

¹) C = Complete break, incl. hinge break H
N = No break

* = registered trademark

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