

VICTREX HT[™] POLYMER P45

General Information

Product Description

High performance thermoplastic material, unreinforced PolyEtherKetone (PEK), semi crystalline, coarse powder for extrusion compounding, low flow, colour natural.

| Material Properties | | | |
|---------------------------------------|---------------|-------|-------------|
| Physical | Nominal Value | Unit | Test Method |
| Density (Crystalline) | 1.30 | g/cm³ | ISO 1183 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus (23°C) | 4200 | MPa | ISO 527-1 |
| Tensile Stress (Yield, 23°C) | 100 | MPa | ISO 527-2 |
| Tensile Strain (Break, 23°C) | 15 | % | ISO 527-2 |
| Flexural Modulus (23°C) | 4200 | MPa | ISO 178 |
| Flexural Stress (23°C) | 170 | MPa | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact Strength (23°C) | 6.5 | kJ/m² | ISO 180/A |
| Unnotched Izod Impact Strength (23°C) | No Break | | ISO 180 |
| Thermal | Nominal Value | Unit | Test Method |
| Glass Transition Temperature | | | ISO 11357-2 |
| Onset | 152 | °C | |
| Midpoint | 160 | °C | |
| Melting Temperature | 373 | °C | ISO 11357-3 |
| Fill Analysis | Nominal Value | Unit | Test Method |
| Melt Viscosity (400°C) | 350 | Pa∙s | ISO 11443 |

Typical Processing Information

| Extrusion | Nominal Value Unit |
|--------------------|--------------------|
| Drying Temperature | 120 to 150 °C |
| Drying Time | 3.0 to 5.0 hr |
| Melt Temperature | 400 to 420 °C |

Important notes:

1) Processing conditions quoted in our datasheets are typical of those used in our processing laboratories

Detailed data available on our website www.victrex.com or upon request.

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