

TECAPEEK CM XP100 black - Stock Shapes (rods, plates, tubes)

Chemical Designation

PEEK (Polyetheretherketone)

Colour

black opaque

Density

1.47 g/cm³

Fillers

carbon fibres, graphite, PTFE

production process: compression moulding

Main features

- inherent flame retardant
- good heat deflection temperature
- hydrolysis and superheated steam resistant
- good machinability
- good slide and wear properties

Target Industries

- oil and gas industry

| <i>Mechanical properties</i> | <i>parameter</i> | <i>value</i> | <i>unit</i> | <i>norm</i> | <i>comment</i> |
|---------------------------------------|------------------|--------------|-------------|-------------|----------------|
| Tensile strength | | 64 | MPa | ASTM D 638 | |
| Modulus of elasticity (tensile test) | | 7500 | MPa | ASTM D 638 | |
| Elongation at break (tensile test) | | 1.5 | % | ASTM D 638 | |
| Flexural strength | | 110 | MPa | ASTM D 790 | |
| Modulus of elasticity (flexural test) | | 6200 | MPa | ASTM D 790 | |
| Compression strength | | 132 | MPa | ASTM D 695 | |
| Compression modulus | | 2200 | MPa | ASTM D 695 | |
| Shore hardness | Shore D | 85 | | ASTM D 2240 | |
| <i>Thermal properties</i> | <i>parameter</i> | <i>value</i> | <i>unit</i> | <i>norm</i> | <i>comment</i> |
| Melting temperature | DSC | 342 | °C | - | |
| <i>Electrical properties</i> | <i>parameter</i> | <i>value</i> | <i>unit</i> | <i>norm</i> | <i>comment</i> |

→ TECAPEEK products are based on Victrex® PEEK polymer.

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