

# TECAPEEK CM XP98 black - Stock Shapes (rods, plates, tubes)

## Chemical Designation

PEEK (Polyetheretherketone)

## Colour

black opaque

## **Density**

1.43 g/cm<sup>3</sup>

## **Fillers**

carbon fibres

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

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→ oil and gas industry

| Mechanical properties                 | parameter | value           | unit | norm        | comment |
|---------------------------------------|-----------|-----------------|------|-------------|---------|
| Tensile strength                      |           | 126             | MPa  | ASTM D 638  |         |
| Modulus of elasticity (tensile test)  |           | 9600            | MPa  | ASTM D 638  |         |
| Elongation at break (tensile test)    |           | 2.2             | %    | ASTM D 638  |         |
| Flexural strength                     |           | 210             | MPa  | ASTM D 790  |         |
| Modulus of elasticity (flexural test) |           | 11000           | MPa  | ASTM D 790  |         |
| Compression strength                  |           | 181             | MPa  | ASTM D 695  |         |
| Shore hardness                        | Shore D   | 93              | _    | ASTM D 2240 |         |
| Thermal properties                    | parameter | value           | unit | norm        | comment |
| Melting temperature                   | DSC       | 342             | °C   | -           |         |
| Heat distortion temperature           |           | > 237           | °C   | ASTM D 648  |         |
| Electrical properties                 | parameter | value           | unit | norm        | comment |
| surface resistivity                   |           | 10 <sup>6</sup> | Ω    | -           |         |

<sup>→</sup> TECAPEEK products are based on Victrex® PEEK polymer.

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Manufactured by: Ensinger Group, a German based plastic manufacturer

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