

## TECAPEEK IM natural - Stock Shapes (rods, plates, tubes)

### Chemical Designation

PEEK (Polyetheretherketone)

### Colour

beige opaque

### Density

1.3 g/cm<sup>3</sup>

### Main features

- very good chemical resistance
- 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
- chemical technology
- energy industry
- mechanical engineering

| Mechanical properties                 | parameter     | value | unit | norm             | comment   |
|---------------------------------------|---------------|-------|------|------------------|---|
| Tensile strength                      | 50mm/min      | 95    | MPa  | ASTM D 638       | 1)  |
| Elongation at break (tensile test)    | 50 mm/min     | 45    | %    | ASTM D 638       | (1) For tensile test: specimen type 1b                            |
| Flexural strength                     | 2mm/min, 10 N | 124   | MPa  | ASTM D 790       |   |
| Modulus of elasticity (flexural test) | 2mm/min, 10 N | 3700  | MPa  | ASTM D 790       |   |
| Ball indentation hardness             |               | 84.5  |      | ASTM D 2240      |   |
| Thermal properties                    | parameter     | value | unit | norm             | comment   |
| Glass transition temperature          |               | 150   | °C   | DIN EN ISO 11357 | 1)  |
| Melting temperature                   |               | 341   | °C   | DIN EN ISO 11357 | (1) Found in public sources.                                      |
| Service temperature                   | short term    | 300   | °C   | -                | (2) Found in public sources.                                      |
| Service temperature                   | long term     | 300   | °C   | -                | Individual testing regarding application conditions is mandatory. |

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