

TECAPEEK MT XRO blue - Stock Shapes (rods, plates, tubes)

Chemical Designation

PEEK (Polyetheretherketone)

Colour

blue opaque

Density

1.39 g/cm³

Fillers

barium sulfate

Main features

- high creep resistance
- x-ray opaque
- good chemical resistance
- good slide and wear properties
- resistance against high energy radiation
- very good stress cracking resistance
- hydrolysis and superheated steam resistant
- very good sterilisable

Target Industries

- medical technology
- food technology
- mechanical engineering

| <i>Mechanical properties</i> | <i>parameter</i> | <i>value</i> | <i>unit</i> | <i>norm</i> | <i>comment</i> |
|--------------------------------------|------------------|--------------|-------------------|-----------------------|---|
| Tensile strength | 50mm/min | 120 | MPa | DIN EN ISO 527-2 | (1) For tensile test: specimen type 1b (2) For Charpy test: support span 64mm, norm specimen. n.b. = not broken |
| Modulus of elasticity (tensile test) | 1mm/min | 4500 | MPa | DIN EN ISO 527-2 1) | |
| Elongation at break (tensile test) | 50mm/min | 10 | % | DIN EN ISO 527-2 | |
| Impact strength (Charpy) | max. 7,5J | n.b. | kJ/m ² | DIN EN ISO 179-1eU 2) | |
| Notched impact strength (Charpy) | max. 7,5J | 5.7 | kJ/m ² | DIN EN ISO 179-1eA | |
| Shore hardness | D | 91 | | DIN EN ISO 868 | |
| <i>Thermal properties</i> | <i>parameter</i> | <i>value</i> | <i>unit</i> | <i>norm</i> | <i>comment</i> |
| Melting temperature | | 342 | °C | DIN 53765 | (1) Found in public sources. Individual testing regarding application conditions is mandatory. |
| Service temperature | short term | 300 | °C | - 1) | |
| Service temperature | long term | 260 | °C | - | |