

# TECAPEEK SM CF30 black - Spin Moulding

## Chemical designation

PEEK (polyetheretherketone)

## Colour

black

### Density

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

#### **Fillers**

carbon fibres

Production process: spin moulding

## Main features

- high thermal and mechanical capacity
- → hydrolysis and superheated steam resistant
- good chemical resistance
- → inherent flame retardant
- good machinability
- very good slide and wear properties
- good wear resistance

## **Target Industries**

- oil and gas industry
- chemical technology
- mechanical engineering
- → aircraft and aerospace technology
- → food engineering
- → automotive industry
- packaging and paper machinery

→ textile industry

| Mechanical properties                | parameter | value | unit | norm            | comment                                 |
|--------------------------------------|-----------|-------|------|-----------------|---|
| Modulus of elasticity (tensile test) |           | 7500  | MPa  | BS EN ISO 527-2 |   |
| Tensile strength                     |           | 104   | MPa  | BS EN ISO 527-2 |   |
| Tensile strength at yield            |           | 104   | MPa  | BS EN ISO 527-2 |   |
| Elongation at break                  |           | 2.6   | %    | BS EN ISO 527-2 |   |
| Shore D hardness                     |           | 89    |      | BS EN ISO 868   | 0.00.00.00.00.00.00.00.00.00.00.00.00.0 |
| Thermal properties                   | parameter | value | unit | norm            | comment                                 |

| Thermal properties           | parameter  | value | unit         | norm      |    | comment   |
|------------------------------|------------|-------|--------------|-----------|----|---|
| Glass transition temperature |            | 143   | $\mathcal C$ | DIN 53765 | 1) | (1) Found in public sources.                              |
| Melting temperature          |            | 343   | $\mathcal C$ | DIN 53765 |    | (2) Found in public sources. Individual testing regarding |
| Service temperature          | short term | 300   | $\mathcal C$ |           | 2) | application conditions is                                 |
| Service temperature          | long term  | 260   | С            |           |    | " mandatory.  |

## TECAPEEK products are based on Victrex® PEEK polymer.

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