

TECATEC PEEK CW50 PL V01 natural - Composite Materials

Kemisk beteckning

PEEK (polyetereterketon)

Färg

Natur

Densitet

1.52 g/cm³

Fillers

kol fibrer

Huvud egenskaper

- utmärkt kemisk resistans
- låg termisk expansionskoefficient
- kontinuerlig service temperatur upp till 260 ° C
- mycket hög styvhet
- mycket hög styrka

Målindustrier

- bilindustrin
- maskinteknik
- olje- och gasindustrin
- säkerhetsteknik
- sporting goods

The material is in the phase of further development. The characteristic values of this product may change.

| General material information | parameter | värde | enhet | norm | anmärkning |
|----------------------------------|-------------------------|-----------------|----------------------------------|-------------------|-----------------------|
| Fibre type | | carbon HT 3k | | - | |
| Fibre architecture | | atlas 5HS | | - | |
| Fibre areal weight | | 280 | g/m ² | - | |
| Fibre volume content | | 50 | % | - | |
| Resin weight content | | 41.9 | % | - | |
| Areal weight finished product | | 482 | g/m ² | - | |
| Material widths | | 625x525 | mm | others on request | |
| thickness | | 1-95 | mm | - | |
| Fibre orientation | | 0-90° | | others on request | |
| Mekaniska Egenskaper | parameter | värde | enhet | norm | anmärkning |
| Draghållfasthet | | 713 | MPa | ISO 527-4 | |
| Elasticitetsmodul (dragprov) | | 59000 | MPa | ISO 527-4 | |
| Böjhållfasthet | | 866 | MPa | ISO 14125 | |
| Elasticitetsmodul (böjningstest) | | 55000 | MPa | ISO 14125 | |
| Kompressionsstyrka | | 645 | MPa | ISO 14126 | |
| slagstyrka (charpy) | | 65.5 | kJ/m ² | - | |
| Interplanar shear strength | | 137 | MPa | ISO 14129 | |
| Interlaminar shear strength | | 65 | MPa | ISO 14130 | |
| Värmeledningsförmåga | parameter | värde | enhet | norm | anmärkning |
| Glasövergångstemperatur | | 143 | °C | - | (1) approximate value |
| Smält temperatur | | 343 | °C | - | |
| Service temperatur | short term | 300 | °C | - | |
| Service temperatur | long term | 260 | °C | - | |
| termisk expansion | in 0° and 90° direction | 5 | 10 ⁻⁶ K ⁻¹ | - | 1) |
| Förtorkning | parameter | värde | enhet | norm | anmärkning |
| Torktemperatur | | 150 | °C | - | |
| Torktid | | 3 | h | - | |

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