

**CF-PEEK Technical Data Sheet(TDS)**

| Mechanical Properties        | Parameter       | Norm                 | Value     | Unit                             |
|------------------------------|-----------------|----------------------|-----------|----------------------------------|
| Tensile Strength             | 50 mm/min       | DIN EN ISO 527-2     | 112       | MPa                              |
| Modulus of Elasticity        | 1 mm/min        | DIN EN ISO 527-2     | 6000      | MPa                              |
| Elongation at Break          | 50 mm/min       | DIN EN ISO 527-2     | 10        | %                                |
| Compressive Strength         | 1% /2%/5%       | EN ISO 604           | 25/47/111 | MPa                              |
| Impact Strength (Charpy)     | max. 7,5J       | DIN EN ISO 179-1eU   | 9         | kJ/m <sup>2</sup>                |
| Ball Indentation Hardness    |                 | ISO 2039-1           | 298       | MPa                              |
| Thermal properties           | Parameter       | Norm                 | Value     | Unit                             |
| Glass Transition Temperature |                 | DIN EN ISO 11357     | 147       | °C                               |
| Melting Temperature          |                 | DIN EN ISO 11357     | 341       | °C                               |
| Service Temperature          | Short term      |                      | 300       | °C                               |
| Service Temperature          | Long term       |                      | 260       | °C                               |
| Thermal Expansion (CLTE)     | 23 - 60°C, long | DIN EN ISO 11359-1;2 | 4         | 10 <sup>-5</sup> k <sup>-1</sup> |
| Thermal Expansion (CLTE)     | 23-100°C, long  | DIN EN ISO 11359-1;2 | 4         | 10 <sup>-5</sup> k <sup>-1</sup> |
| Thermal Expansion (CLTE)     | 100-150°C, long | DIN EN ISO 11359-1;2 | 6         | 10 <sup>-5</sup> k <sup>-1</sup> |
| Specific Heat                |                 | ISO 22007-4 : 2008   | 1.2       | J/(g(K)                          |
| Thermal Conductivity         |                 | ISO 22007-4 : 2008   | 0.66      | W/(K*m)                          |

| Electrical Properties | Parameter | Norm             | Value                              | Unit |
|-----------------------|-----------|------------------|------------------------------------|------|
| Surface Resistivity   |           | DIN EN 61340-2-3 | 10 <sup>3</sup> – 10 <sup>12</sup> | Ω    |
| Volume Resistivity    |           | DIN EN 61340-2-3 |                                    | Ω*cm |

| Other Properties         | Parameter        | Norm                | Value     | Unit |
|--------------------------|------------------|---------------------|-----------|------|
| Water Absorption         | 24h/96h          | DIN EN ISO 62       | 0.02/0.03 | %    |
| Resistance to weathering |                  | -                   | -         |      |
| Flammability (UL94)      | Corresponding to | DIN IEC 60695-11-10 | V0        |      |

Updated on November 11, 2022