

TECHNICAL DATA SHEET

High-performance plastic type CP

General notes:

- » **PEEK** polyetheretherketone reinforced with carbon nano
- » very hard, rigid, high tensile and flexural strength, very high wear resistance
- » high heat capability (260-300°C), good dimension stability, low thermal linear expansion coefficient
- » excellent resistance to chemicals and aggressive agents, excellent resistance to thermal ageing
- » ESD-safe material 10^5 - 10^6 Ohm
- » typical applications include handling of components in cleaning/chemical/assembly processes also at high temperature (soldering).

Mechanical properties

Flexural modulus +23°C	21400 MPa	<i>ISO 178 ASTM D 790</i>
Flexural strength +23°C	350 MPa	<i>ISO 178 ASTM D 790</i>
Tensile modulus +23°C	24000 MPa	<i>ISO 527 ASTM D 638</i>
Tensile strength +23°C	190 MPa	<i>ISO 527 ASTM D 638</i>
Izod - Impact strength (notched) +23°C	65 J/m	<i>ISO 180/4A ASTM D 256</i>

Thermal properties

Temp. of defl. under load (1.80 MPa)	300 °C	<i>ISO 75 ASTM D648</i>
Continuous Use Temperature	260°C	<i>20'000 h</i>
Short Time Temperature	300°C	

Electrical properties

Surface resistivity	10^5 - 10^6 Ohm	
Decay time	< 0.2 sec	<i>1000-10 V</i>

Other properties

Density	1.28 g/ccm	<i>ISO 1183</i>
Water absorption in water 23°C (24h)	0.60%	<i>ISO 62</i>