

**TECHNICAL DATA SHEET**

# Engineering plastic type TC

**General notes:**

- » **PTFE** polytetrafluorethylene (a material equivalent to Teflon<sup>®</sup>) + 25% carbon powder
- » extremely low sliding friction coefficient
- » anti-adhesive surface
- » excellent high and low temperature resistance
- » excellent chemical resistance
- » high pressure and wear resistance as pure PTFE
- » electrically and thermally conductive
- » typical applications include handling thin and delicate substrates like glass, metal and silicon wafers while avoiding scratching or breaking of thin layers and handling of ESD components

## Mechanical properties

Flexural modulus +23°C	<b>1100 MPa</b>	ASTM D 790
Flexural strength +23°C	<b>16 MPa</b>	ASTM D 790
Tensile strength +23°C	<b>13 MPa</b>	ASTM D 638
Tensile elongation at break +23°C	<b>75%</b>	ASTM D 638
Izod - Impact strength (notched) +23°C	<b>186 J/m</b>	ASTM D 256
Hardness, Shore D	<b>62</b>	ASTM D 785

## Thermal properties

Coef. of lin. thermal expansion, normal	<b>10.8 cm/cm °C</b>	ASTM D 696
Continuous Use Temperature	<b>from -100 to +260 °C</b>	20'000 h
Short Time Temperature	<b>+280°C</b>	

## Electrical properties

Volume resistivity	<b>10<sup>4</sup> Ohm cm</b>	ASTM D 257
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## Other properties

Density	<b>2.10 g/cm<sup>3</sup></b>	ISO 1183
Colour	<b>Black</b>	