

Engineering plastic type TC

General notes:

- » **PTFE** polytetrafluorethylene (a material equivalent to Teflon®) + 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	1100 MPa	ASTM D 790
Flexural strength +23°C	16 MPa	ASTM D 790
Tensile strength +23°C	13 MPa	ASTM D 638
Tensile elongation at break +23°C	75%	ASTM D 638
Izod - Impact strength (notched) +23°C	186 J/m	ASTM D 256
Hardness, Shore D	62	ASTM D 785

Thermal properties

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

Electrical properties

Volume resistivity	10⁴ Ohm cm	ASTM D 257
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Other properties

Density	2.10 g/cm³	ISO 1183
Colour	Black	

This document contains information based on average values as obtained from the results of laboratory tests and observations made on the material. Ideal-tek SA declines all responsibility from an improper use of the product described in this document.