

# Data Sheet: PC - PBT

## Details

This material has high toughness, dimensional stability and good resistance to heat and chemicals. Furthermore, it has good impact resistance and stiffness. It is used in gear cases, automotive bumpers, and other applications that require chemical and corrosion resistance.

## Key Features

Tough • Dimensionally stable • Suitable for applications that require corrosion resistance

## Thermal Properties

Property	Value
Heat deflection [°C]	109
Glass transition temperature [°C]	140
Vicat softening temperature [°C]	139
Coefficient of thermal expansion [K-1 · 10-6]	20
Thermal conductivity [W/m · K]	0.17
Specific heat capacity [J/kg · K]	1400
Melting point [°C]	223

## Mechanical Properties

Property	Value
Tensile strength [MPa]	41
Modulus of elasticity [GPa]	1.99
Flexural strength [MPa]	64
Flexural modulus [GPa]	1.93

Hardness	109
Impact strength [KJ/m <sup>2</sup> ]	21.4
Elongation at break [%]	4.6

## Physical Properties

Property	Value
Density [g/cm <sup>3</sup> ]	1.2
Water Absorption [%]	0.06
Electrical Resistivity [ohm-cm]	$16 \times 10^{15}$

## Reference

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