

PC-PBT

Alternative Designations

Polycarbonate-Polybutylene Terephthalate.

Key Features

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

Description

This is a type of engineering plastic that offers a high strength-to-weight ratio and is resistant to many chemicals. It is often used in the automotive and aerospace industries. This material has high toughness, dimensional stability and good resistance to heat. 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.

Mechanical Properties

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|---------------------|----------|
| Tensile modulus | 1986 MPa |
| Tensile strength | 41.8 Mpa |
| Elongation at break | 4.6% |
| Flexural strength | 64.4 MPa |
| Flexural modulus | 1.93 GPa |
| Hardness (Shore D) | 109 |

Thermal Properties

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|--|-------|
| Melting temperature (20°C/min) | 223°C |
| Heat deflection temperature (1.80 MPa) | 109°C |
| Softening temperature | 139°C |

Physical Properties

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|---------|-----------------------|
| Density | 1.2 g/cm ³ |
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