



PC (Polycarbonate)

Alternative Designations

Polycarbonate

Key Features

Transparent • Durable • Shatter resistant • Good electrical properties

Description

This is a naturally transparent plastic with high strength and durability on impact. It is shatter resistant and heat resistant. It is made from a mixture of bisphenol A (BPA) and phosgene. It has high stiffness and high viscosity. PC is generally easy to work with and is used in applications such as food and beverage packaging, medical devices, eyewear, electronics, and construction materials.

Mechanical Properties

| | |
|---------------------|-----------|
| Tensile modulus | 2206 MPa |
| Tensile strength | 65.5 MPa |
| Elongation at break | 60% |
| Flexural strength | 103.4 MPa |
| Flexural modulus | 2.58 GPa |
| Hardness | 95 |

Thermal Properties

| | |
|--|-------|
| Heat deflection temperature (1.80 MPa) | 132°C |
| Softening temperature | 145°C |

Physical Properties

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

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.