



PVC

Alternative Designations

Polyvinyl chloride

Key Features

Resistant to weathering, chemicals, corrosion and shock • Biocompatible • High strength

Description

PVC is made from a polymer of vinyl chloride. This polymer is then combined with other chemicals to create a variety of PVC products. It is the third most synthesized thermoplastic material. It is resistant to weathering, chemicals, corrosion and shock. It has good resistance to abrasion and good insulation properties. Furthermore, it is tough, lightweight and fire retardant. It is commonly used for pipes, window frames, bottles, electrical distribution boxes etc.

Mechanical Properties

Tensile modulus	2833.7 MPa
Tensile strength	51.5 MPa
Elongation at break	3%
Flexural strength	88.2 MPa
Flexural modulus	3.31 GPa
Hardness	82

Thermal Properties

Heat deflection temperature (1.80 MPa)	80°C
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Physical Properties

Density	1.41 g/cm ³
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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.