



Polypropylene (PP)

Alternative Designations

Polypropylene homopolymer (PPHP)

Key Features

Impressive impact strength • Resistant to moisture

Description

Polypropylene has excellent resistance to moisture and chemicals and impressive impact strength. In addition to being lightweight and durable, polypropylene is also heat-resistant and chemical-resistant, making it ideal for a variety of uses. Polypropylene can be clear or opaque, and is available in a variety of colours. It is a tough material with resistance to fatigue as well as electrical insulation. It is widely used in both domestic and industrial applications.

Mechanical Properties

Tensile modulus	1600 MPa
Tensile strength	30 MPa
Elongation at break	150%
Flexural strength	40 MPa
Flexural modulus	1.5 GPa
Hardness (shore D)	70

Thermal Properties

Melting temperature (20°C/min)	165°C
Heat deflection temperature (1.80 MPa)	100°C
Heat deflection temperature (0.45 MPa)	130°C
Softening temperature	85°C

Physical Properties

Density	0.91 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.