

Data Sheet: Polypropylene

Details

Polypropylene has excellent resistance to moisture and chemicals, impressive impact strength and good elasticity. It is a tough material with resistance to fatigue as well as electrical insulation. It is widely used in both domestic and industrial applications.

Key Features

Impressive impact strength • Elastic • Resistant to moisture

Thermal Properties

Property	Value
Heat deflection [°C]	100
Glass transition temperature [°C]	-18
Vicat softening temperature [°C]	85
Coefficient of thermal expansion [K-1 · 10-6]	17
Thermal conductivity [W/m · K]	0.18 – 0.25
Specific heat capacity [J/kg · K]	1600
Melting point [°C]	165

Mechanical Properties

Property	Value
Tensile strength [MPa]	30
Modulus of elasticity [GPa]	1.6
Flexural strength [MPa]	40

Flexural modulus [GPa]	1.5
Hardness	70
Elongation at break [%]	150

Physical Properties

Property	Value
Density [g/cm ³]	0.91
Water Absorption [%]	0.01
Electrical Resistivity [ohm-cm]	16×10^{15}

Reference

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