



PPE-PS

Alternative Designations

Polyphenylene ether – Polystyrene

Key Features

Ductile • Resistant to impact • Strong • Good flow ability

Description

This polymer is a blend of polyphenylene ether and polystyrene. It is highly ductile and exhibits good resistance to impact and good surface appearance. It has low moisture absorption and is dimensionally stable. Its tensile strength goes up to 50 MPa at room temperature. It is typically used for valve components, water pumps and medical devices.

Mechanical Properties

Tensile modulus	1650 MPa
Tensile strength	50 MPa
Elongation at break	30%
Flexural strength	74 MPa
Flexural modulus	2.2 GPa
Hardness (Shore D)	89

Thermal Properties

Heat deflection temperature (1.80 MPa)	72°C
Heat deflection temperature (0.45 MPa)	82°C
Softening temperature	85°C

Physical Properties

Density	1.12 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.