



Data Sheet

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 |
|---------|------------------------|

Reference

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