



# PPS

## Alternative Designations

Polyphenylene Sulphide

## Key Features

Rigid, brittle • Resistant to UV light and chemicals •  
Good dimensional stability

## Description

PPS is a semi-crystalline, aromatic polyolefin resin. This material has excellent strength of 80MPa and is highly rigid. It is resistant to high temperature, UV light, chemicals and creep. It is dimensionally stable and has good electrical insulation properties. It is also fire resistant. However, it is brittle. It is applied in the production of automotive parts such as fuel injection systems, switches, and electronic devices such as hair dryer grills, valves for steam iron.

## Mechanical Properties

Tensile modulus	3447.3 MPa
Tensile strength	93 MPa
Elongation at break	15%
Flexural strength	144.7 MPa
Flexural modulus	3.96 GPa
Hardness (Shore D)	95

## Thermal Properties

Melting temperature (20°C/min)	282°C
Heat deflection temperature (1.80 MPa)	121°C

## Physical Properties

Density	1.35 g/cm <sup>3</sup>
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## Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://Materialdatacenter.com) for further information on this material.