Injection Molding

PPS (Polyphenylene sulfide)

Key Features

Stiffness • Chemical resistance • Flame retardancy • Thermal conductivity • Heat resistance > 200°C

Applications

End-use parts • Aerospace • Automotive • Electronics • Industrial

Product Description

PPS is a high-performance resin known for its high thermal conductivity, excellent mechanical strength, and chemical resistance. This injection molding material offers superior dimensional stability and flame retardancy, making it suitable for automotive thermal management components, electrical heat sinks and connectors, industrial pump and valve parts, consumer electronics cooling components, and aerospace heat-resistant parts.

Properties*

Tensile modulus	13,800 MPa
Tensile stress at break (5mm/min)	100 MPa
Tensile strain at break (5mm/min)	1.2%
Flexural strength	170 MPa
Flexural modulus	13,000 MPa
Charpy impact strength, 23°C	19.7 kJ/m²
Heat deflection temperature (0.45 MPa)	280°C
Heat deflection temperature (1.80 MPa)	260°C
Thermal conductivity, flow	1.5 W/(m K)
Density	1.63 g/cm ³
Flame retardancy (1.5 mm)	UL 94 V-0

*Based on material CoolPoly® D5110

Reference

For more detailed source information, please consult the original document linked <u>here</u>. We encourage users to verify the data's relevance and suitability for their specific needs.



