

PPS PLASTIC PELLETS

High Performance Thermoplastic
for Demanding Applications

Excellent Heat Resistance · Chemical Resistance
Inherent Flame Retardancy · Dimensional Stability



High
Temperature
Resistance



Excellent
Chemical
Resistance



Inherent
Flame Retardancy



High Strength
& Stiffness



Dimensional
Stability



*Stronger Materials
Broader Possibilities*

Product Introduction

PPS (Polyphenylene Sulfide) is a high-performance, semi-crystalline thermoplastic with excellent heat resistance, chemical resistance, inherent flame retardancy and good dimensional stability. SZHL supplies high-quality PPS resin pellets, suitable for injection molding, extrusion and other processing methods. PPS is widely used in automotive, electrical & electronics, industrial and chemical fields.

Typical Grades



Standard Grade
General purpose,
balanced performance
and cost-effectiveness



Glass Fiber Reinforced
(GF 10% / 20% / 30% / 40%)
Higher strength, higher
modulus, improved
heat resistance



Mineral / Carbon Filled
(e.g. 10% / 20% / 30%)
Enhanced stiffness,
dimensional stability
and wear resistance

Typical Technical Data (Unfilled PPS, Reference)

Property	Typical Value	Test Method
Density (g/cm ³)	1.34-1.36	ISO 1183 / ASTM D792
Melting Point (°C)	280-285	DSC (ISO 11357 / ASTM D3418)
Glass Transition Temperature (°C)	~ 85	DSC (ISO 11357 / ASTM D3418)
Tensile Strength (MPa)	60-90	ISO 527 / ASTM D638
Tensile Modulus (MPa)	3200-4000	ISO 527 / ASTM D638
Flexural Strength (MPa)	90-140	ISO 178 / ASTM D790
Flexural Modulus (MPa)	3500-4500	ISO 178 / ASTM D790
Notched Izod Impact (kJ/m ²)	2-5	ISO 180 / ASTM D256
Heat Deflection Temperature (1.8 MPa, °C)	≥ 260	ISO 75 / ASTM D648
Limiting Oxygen Index (LOI, %)	≥ 34	ASTM D2863
UL 94 Flammability	V-0 (typ.)	UL 94
Water Absorption (24 h, %)	≤ 0.05	ISO 62 / ASTM D570

Note: The above data are typical values for unfilled PPS resin. Values may vary depending on grade, formulation and testing method. Customized grades (glass fiber, mineral filled, carbon fiber filled, flame retardant, etc.) are available upon request.

Key Features

- ✓ Excellent high temperature resistance (long-term use up to 190-220°C)
- ✓ Outstanding chemical resistance (acids, alkalis, solvents, fuels, etc.)
- ✓ Inherent flame retardancy (LOI > 34%, UL 94 V-0)
- ✓ High mechanical strength and stiffness
- ✓ Excellent dimensional stability
- ✓ Low moisture absorption
- ✓ Good electrical insulation properties
- ✓ Wear and creep resistance
- ✓ Various grades and custom formulations available
- ✓ Stable quality and global supply

*Your Reliable
Material Partner*

Application Areas



Automotive

Engine components, electrical connectors, sensors, fuel system parts



Electrical & Electronics

Connectors, bobbins, switch components, insulating parts



Industrial Equipment

Valves, pumps, seals, chemical resistant parts



Chemical Industry

Corrosion-resistant components, filtration parts, pipe fittings



Consumer & Home Appliances

High temperature resistant structural parts

