

# PPS AROLUX™ PPS

Arolux Polyphenylene Sulfide (PPS) is a high performance semi-crystalline thermoplastic with continuous service temperatures up to 240°C. It offers high surface hardness and rigidity, very good chemical and oxidation resistance, very low water absorption, and is inherently flame-resistant (UL 94: V-0). PPS is a popular choice for structural applications in demanding chemical environments at elevated temperatures.



The following physical property information is based on typical values of the base resin.

Property	Units	Test Standard
<b>Mechanical</b>		
Density	1.30 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) <sup>1</sup> (316 °C/5kg)	20 g/10 min	ASTM D1238
Water Absorption (24 hr, 23°C)	0.10%	ASTM D570
Mold Shrinkage <sup>2</sup>	1.30%	—
<b>Mechanical</b>		
Tensile Modulus	2600 MPa	ISO 527
Tensile Strength	55.0 MPa	ISO 527
Tensile Elongation (Break)	15%	ISO 527
Flexural Modulus	2500 MPa	ISO 178
Flexural Strength	100 MPa	ISO 178
<b>Impact</b>		
Notched Izod Impact Strength	30 KJ/m <sup>2</sup>	ISO 180/A
<b>Thermal</b>		
Thermal Conductivity	0.20 W/m/K	ASTM E1530
Coefficient of Linear Thermal Expansion		
-50 to 50°C	7.5E-5 cm/cm/°C	ISO 11359-2
100 to 200°C	1.2E-4 cm/cm/°C	ISO 11359-2
Heat Deflection Temperature		
0.45 MPa	130 °C	ASTM D648
1.8 MPa	95 °C	ASTM D648
<b>Electrical</b>		
Volume Resistivity	1.0E+15 ohm-cm	ASTM D257
Dielectric Strength	24 kV/mm	ASTM D149

## Applications Include:

- Fuel System Components
- De-icing chemical components
- Electrical plugs, connectors, bobbins, relays, switches,
- Air intake systems
- Pumps, valves, gaskets components in corrosive environments
- Metal Replacement / Weight Reduction

## Manufacturing Capabilities:



## Colors:



In addition to our standard capabilities, Westlake also has the ability to process custom resins in various sizes and colors with some exceptions.

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Phone : 1.610.459.1000  
 Phone : 1.800.000.1700  
 Fax : 610.459.1084  
 490 West Lenni road  
 Lenni, PA 19052  
 U.S.A  
 Email : info@westlakeplastics.com



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