

## Toyobo TS401 PPS, 40% Glass Fiber Reinforced

Category : Polymer , Thermoplastic , Polyphenylene Sulfide (PPS) , Polyphenylene Sulfide (PPS) with 40% Glass Fiber Filler

### Material Notes:

**Key Feature:** General Purpose Grade - balanced characteristics suitable for a broad range of uses. High performance injection-molding resin created from crystalline polyphenylene sulfide, using a special formulation technology developed by Toyobo. Excellent physical, electrical, and thermal properties, corrosion resistant, and inherently flame retardant. PPS resins are used in the electrical, electronic, automotive, and industrial machinery industries. Information provided by Toyobo Co., Ltd

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Toyobo-TS401-PPS-40-Glass-Fiber-Reinforced.php](http://www.lookpolymers.com/polymer_Toyobo-TS401-PPS-40-Glass-Fiber-Reinforced.php)

Physical Properties	Metric	English	Comments
Density	1.65 g/cc	0.0596 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.030 %	0.030 %	24 hrs; ASTM D570
Linear Mold Shrinkage	0.0025 cm/cm	0.0025 in/in	
Linear Mold Shrinkage, Transverse	0.0090 cm/cm	0.0090 in/in	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	122	122	ASTM D785
Tensile Strength, Ultimate	185 MPa	26800 psi	ASMT D638
Elongation at Break	1.7 %	1.7 %	ASTM D638
Modulus of Elasticity	13.7 GPa	1990 ksi	ASMT D638
Flexural Yield Strength	236 MPa	34200 psi	Flexural elongation is 2%; ASTM D790
Flexural Modulus	12.8 GPa	1860 ksi	ASMT D790
Izod Impact, Notched	1.60 J/cm	3.00 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	8.00 $\mu\text{m}/\text{m}\cdot\text{C}$	4.44 $\mu\text{in}/\text{in}\cdot\text{F}$	MD
	@Temperature 20.0 $^{\circ}\text{C}$	@Temperature 68.0 $^{\circ}\text{F}$	
CTE, linear, Transverse to Flow	63.0 $\mu\text{m}/\text{m}\cdot\text{C}$	35.0 $\mu\text{in}/\text{in}\cdot\text{F}$	
	@Temperature 20.0 $^{\circ}\text{C}$	@Temperature 68.0 $^{\circ}\text{F}$	
Melting Point	282 $^{\circ}\text{C}$	540 $^{\circ}\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	$\geq 260$ $^{\circ}\text{C}$	$\geq 500$ $^{\circ}\text{F}$	ASTM D648

Thermal Properties	Metric	English	Comments
<b>Electrical Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Electrical Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	ASTM D257
Dielectric Constant	4.0	4.0	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	4.0	4.0	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dissipation Factor	12.0 kV/mm	305 kV/in	ASTM D149
Arc Resistance	0.0014	0.0014	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	0.0015	0.0015	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Arc Resistance	104 sec	104 sec	ASTM D495
Comparative Tracking Index	125 V	125 V	IEC test

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China