Introduction of developed product flexible PPS resin film

Sheedom Co., Ltd.

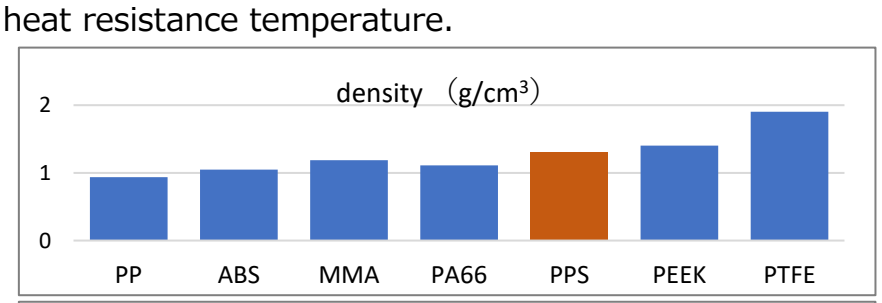
Characteristics of PPS resin

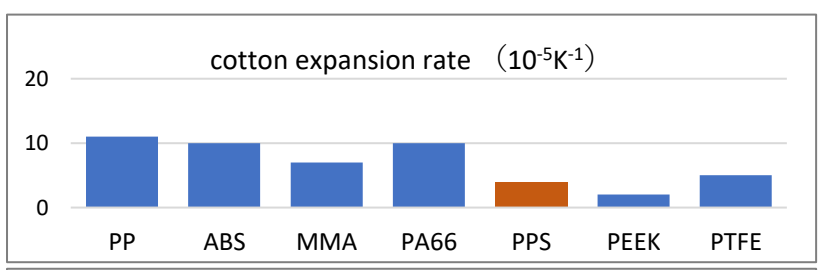
Polyphenylene sulfide resin possesses high heat resistance with a melting point of approximately 280°C, retardancy.excellent chemical resistance, and flame
It is a super engineering plastic that exhibits excellent dimensional stability as well as high mechanical properties.

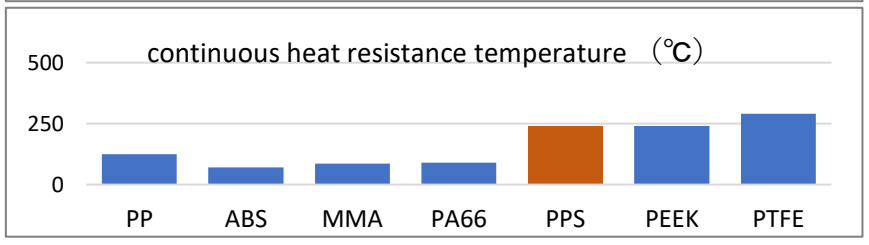
- ■Heat resistance that allows continuous use at 200°C or higher
- ■High rigidity and strength retention over a wide temperature range
- ■Excellent dimensional stability in a wide range of environmental conditions
- ■excellent electrical insulation

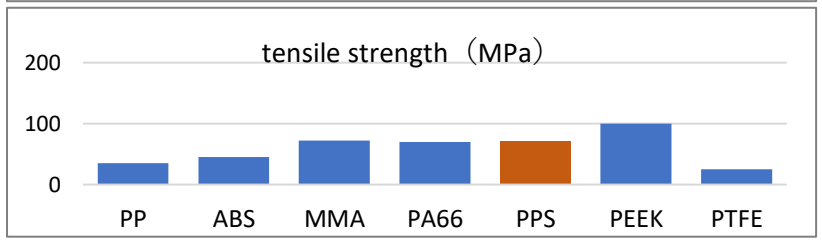
Comparison with other resins

Density is about 1.3g/cm3, but the coefficient of linear expansion is small and it is excellent in continuous heat resistance temperature.









※The graph above is not a guaranteed value.

Physical properties of our PPS film

Due to our original manufacturing technology, it has an extremely uniform surface texture with very few fish eyes without stretching.

◇physical properties

product name				SCP101
item	unit	Measuring method	direction	Product thickness ： 40μm
density	g/cm³	ISO 1183		1.33
water absorption, 23℃/24hrs.	%	ISO 62		0.02
tensile strength	MPa	JIS K-7127	MD/TD	72/58
tensile elongation	%		MD/TD	150/140
elastic modulus	MPa		MD/TD	4,050/3,240
Deflection temperature under load, 1.80MPa	℃	ISO 75-1,2		105
linear thermal expansion coefficienta, -50～50℃	x 10-5/K	ISO 11359-2	MD/TD	4.0/5.0
linear thermal expansion coefficienta, 100～200℃	x 10-5/K	ISO 11359-2	MD/TD	13.0/13.0
Combustion qualityc / 厚み(mm)		UL 94		V-0 equivalent
dielectric breakdown strength, t=1.0mm	kV/mm	IEC60243-1		30
permittivity, 1MHz	-	IEC 60250		3
loss tangent, 1MHz	-	IEC 60250		0.002
Tracking resistance (CTI)	V	IEC 60112		200
Volume resistivity	Ω ·cm	IEC 60093		10^{17}

※The above physical property values are measured values, not guaranteed values.

◇chemical resistance

	yes or no
38% HCL	OK
40% HNO_3	OK
90% H_2SO_4	OK
100% MIBK	OK
100% benzene	OK

	yes or no
100% xylene	OK
20% caustic soda	OK
100% Cyclohexane	OK
100% oleic acid	OK
100% oil	OK

※Test condition ： 40℃ immersion
※An example is shown on the left.
※The values on the left are measured values, not guaranteed values.

Lineup of our PPS film

width ： 600㎜　　Thickness : 20～300μm　　※Please contact us for your desired width and thickness.