

## Product Information

# Polyphenylsulfone(PSU)

### Physical Form And Storage

PSU pellets are supplied in cartons lining aluminum foil bag, which can be stored indefinitely, provided the packaging remains undamaged.

PSU pellets absorb moisture very rapidly. Therefore, the pellets need to be dried at least 6h at 160 °C in a vacuum or dry air drier prior to processing.

### Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product.



DONGGUAN SHENGWEN PLASTIC TRADING CO.,LTD.

## PSU Technical Data Sheet

Typical values for uncolored product at 23°C	Test method	Unit	Typical values		
			F3050	F3150	F3250
<b>Mechanical Properties</b>					
Tensile Strength	ISO 527-1/-2	MPa	68	68	68
Tensile Modulus	ISO 527-1/-2	MPa	2480	2600	2600
Tensile Elongation (Yield)	ISO 527-1/-2	%	5.7	5.7	5.7
Flexural Strength	ISO 178	MPa	105	105	105
Flexural Modulus	ISO 178	MPa	2600	2480	2480
Notched Izod Impact	ISO 180/A	kJ/m <sup>2</sup>	5.5	5.5	5.5
<b>Thermal Properties</b>					
HDT/A @1.8 MPa Heat Deflection Temperature	ISO 75-1/-2	°C	175	170	170
Tg, DSC, 10 °C/min Glass Transition Temperature	ISO 11357-1/-2	°C	185	185	185
@23°C, CLTE - Flow	ISO11359-1/-2	E-6/K	53	53	53
<b>Flammability</b>					
Flame Rating @ 3mm thickness	UL94	Class	HB	HB	HB
Flame Rating @ 4.5mm thickness	UL94	Class	V0	V0	V0
<b>Electrical Properties</b>					
100V volume Resistivity	IEC 60093	Ω · m	>1E13	>1E13	>1E13
100V Surface Resistivity		Ω	>1E15	>1E13	>1E13
Dielectric Constant @100HZ @1MHZ	IEC 60250	/	3.1	3.1	3.1
Dissipation factor @1MHZ	IEC 60250	E-4	64	64	64
Dielectric Strength K20/K20,(60*60*1mm <sup>3</sup> )	IEC 60243-1	KV/mm	40	40	40
CTI	IEC 60112	/	125	125	125
<b>General Properties and Processability</b>					
Density	ISO1183	g/cm <sup>3</sup>	12.4	1.24	1.24
Moisture Absorption, Equilibrium 23 °C 50% r.h	ISO62	%	0.3	0.3	0.3
Mold shrinkage ( Flow )	ISO 2577, 294-4	/	0.68	0.68	0.68
Mold shrinkage (Vertical)	ISO 2577, 294-4	/	0.72	0.72	0.72
MFR @365°C/5kg	ISO 1133	g/10min	3.0-6.0	6.0-10.0	12.0-18.0
Processing (Melt) Temp, injection/Extrusion	/	°C	320-370	320-370	320-370
Mold Temp, injection Extrusion	/	°C	120-160	120-160	120-160

## Notes:

Typical values: These are not to be construed as specifications.



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