



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

PPS - 40% Glass Fiber Filled PPS Semi-Crystalline High-Performance Plastic

PPS (Polyethylene Sulphide) is a high-performance thermoplastic. It is not part of the PI family. It has a lower heat and hostile environment resistance than the PI family but at a lower cost. PPS attributes include outstanding dimensional stability, minimal moisture absorption, and a low coefficient of linear thermal expansion. Glass fiber addition improves mechanical and electrical properties - especially chemical resistance at elevated temperatures. Applicable industries include automotive, electrical, and motors (to name a few). The sheet color is natural.

The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

PROPERTIES	ISO/IEC*			ASTM*		
	Test Method	Units	Typical Values	Test Method	Units	Typical Values
PHYSICAL	Density			ASTM D792	lb/in ³	0.0611
	Water Absorption 24 hrs.			ASTM D570	%	0.02
	Linear Mold Shrinkage, Flow			ASTM D955	in/in	0.0020
	Linear Mold Shrinkage, Transverse			ASTM D955	in/in	0.0050
THERMAL	CLTE, Parallel To Flow	ISO 11359	µm/m-°C	ASTM E831(TMA)	µin/in-°F	8.33 / 11.1
	CLTE, Transverse To Flow	ISO 11359	µm/m-°C	ASTM E831(TMA)	µin/in-°F	44.4 / 22.2
	Thermal Conductivity	ISO 8302	W/m-K	ASTM C-177	BTU-in/ft ² .hr.°F	2.22
	Max Continuous Service Temperature in Air		°C		°F	392 - 428
	Heat Deflection Temperature (264 PSI)	ISO 75	°C	ASTM D648	°F	509
	Flammability: UL94					V-0
Flammability: Oxygen Index	ISO 4589-1/-2	%		ASTM D2863	%	47
MECHANICAL	Rockwell M Hardness	ISO 2039-1		ASTM D785		104
	Rockwell R Hardness	ISO 2240		ASTM D785		122
	Ultimate Tensile Strength	ISO 527-1	MPa	ASTM D638	PSI	23,100
	Tensile Stress	ISO 527-2	MPa			150.0
	Elongation at Break	ISO 527-2	%	ASTM D638	%	1.1
	Flexural Strength	ISO 178	MPa	ASTM D790	PSI	32,100
	Flexural Modulus	ISO 178	GPa	ASTM D790	KSI	2,100
	Compressive Strength			ASTM D695	PSI	39,200
	Poissons Ratio			ASTM E132		0.38
IZOD Impact, Notched	ISO 180	kJ/m ²	9.00	ASTM D256	ft-lb/in	1.70
IZOD Impact, Unnotched	ISO 180	kJ/m ²	25.00	ASTM D256	ft-lb/in	7.49
ELECTRICAL	Volume Resistivity	IEC 60093	Ohm-cm	ASTM D257	Ohm-cm	10 ¹⁶
	Surface Resistivity	IEC 60093	Ohms/sq	ASTM D257	Ohms/sq	10 ¹⁶
	Insulation Resistance @ 90°C	IEC 60167	Ohm			10 ¹¹
	Dielectric Constant @ 1 MHz / 1000 Hz	IEC 60243-1		ASTM D150		3.8 / 3.9
	Dielectric Strength	IEC 60243-1	kV/mm	ASTM D149	V/mil	508
	Dissipation Factor @ 1 MHz / 1000 Hz	IEC 60250		ASTM D150		0.0020 / 0.0020
	Arc Resistance: UL 746A		Seconds	ASTM D495	Seconds	125
	Comparative Track Index	IEC 60112	Volts	175	UL 746	Volts

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.