

DATA SHEET

GLASS FILLED PPS

40% Glass Reinforced Compression Molded Polyphenylene Sulfide

PROPERTY	UNITS	VALUE
MECHANICAL		
Specific Gravity	-	1.7
Tensile Strength	psi	13,000
Tensile Modulus	psi	730,000
Elongation (at break)	%	2
Flexural Strength	psi	23,000
Flexural Modulus	psi	1,000,000
Compressive Strength	psi	24,000
Hardness, Rockwell	-	R125
Coefficient of Friction (Dry vs. Steel)	-	--
Limiting PV (with 4:1 safety factor)	psi x fpm	--
THERMAL		
Coefficient of Linear Thermal Expansion	in/in/F	2.50×10^{-5}
Heat Deflection Temperature (264 psi)	F	490
Glass Transition Temperature	F	230
Continuous Service Temperature	F	450
Thermal Conductivity	BTU/in/hr.ft.F	2.10
ELECTRICAL		
Dielectric Strength	volts/mil	385
Volume Resistivity	ohm-cm	$>10^{13}$
OTHER		
Water Absorption, Immersion, 24 hrs.	% by wt.	.02
Water Absorption, Immersion, Saturation	% by wt.	.03

ENGINEERING NOTES:

- * No known solvents below 400 degrees F.
- * Lowest moisture absorption of all HPMS.
- * Alternative to PEEK at lower temperatures.
- * Poor abrasion resistance.