



Product Data Sheet & General Processing Conditions

ZOVGOV® M27G4FR Polyphenylene Sulfide (PPS) Glass Fiber UL94 V-0

This series of compounds offer outstanding strengths combined with good heat and chemical resistance which may successfully be maintained in low load applications operating up to 500F. These ignition resistant materials exhibit excellent strength and chemical resistance.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.49	1.49	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0030 in/in	0.20 - 0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.020 %	0.020 %	D 570
MECHANICAL			
Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.3 ft-lbs/in	69 J/m	D 256
unnotched 1/8 in (3.2 mm) section	4.0 ft-lbs/in	214 J/m	D 4812
Tensile Strength	16000 psi	110 MPa	D 638
Tensile Elongation	1.3 %	1.3 %	D 638
Tensile Modulus	1.40 x 10 ⁶ psi	9653 MPa	D 638
Flexural Strength	19000 psi	131 MPa	D 790
Flexural Modulus	1.30 x 10 ⁶ psi	8964 MPa	D 790
Hardness Rockwell, R	121	121	D 785
ELECTRICAL			
Dielectric Strength, S/T, in oil	350 VPM	13.8 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.5	3.5	D 150
Dissipation Factor, 1 MHz, Dry	0.0010	0.0010	D 150
Arc Resistance	120 s	120 s	D 495
Volume Resistivity	> 1E16 ohm.cm	> 1E16 ohm.cm	D 257
THERMAL			
Deflection Temperature @ 264 psi (1820 kPa)	500 °F	260 °C	D 648
Ignition Resistance* Flammability	V-0 @ 1/32 in	V-0 @ 0.8 mm	UL94

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	585 - 625 °F	307 - 329 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	6 hrs @ 300 °F	6 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %

PROCESSING NOTES