

# FZ-3500

- **Out line:** FZ-3500 is glass fiber and mineral filled polyphenylene sulfide compound which provides excellent electric insulation properties including dielectric strength , arc resistance and arc tracking.
- **Color:** Black

## Engineering Properties of FZ-3500

Properties	Test Method	Unit	FZ-3500
General Information			GF/Filler High CTI & Arc resistance
<ASTM>			
<b>Physical</b>			
Specific gravity	D-792	-	2.00
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt. %	0.02
Mold shrinkage, MD /TD <sup>a</sup>	D-955	%	0.25/1.0
<b>Mechanical</b>			
Tensile strength	D-638	MPa	100
Tensile modulus	D-638	MPa	18500
Tensile elongation at break	D-638	%	0.6
Poisson's ratio	-	-	0.33
Flexural strength	D-790	MPa	150
Flexural modulus	D-790	MPa	17500
Flexural elongation at break	D-790	%	0.9
Izod impact strength notched / un notched	D-256	J/m	55/200
Compressive strength	D-695	MPa	120
Rockwell hardness, R/M	D-785	-	121/100
Coefficient of friction <sup>b</sup> , static /dynamic	-	-	0.35/0.35
<b>Thermal</b>			
Distortion temp. of under load, 1.82MPa	D-648	°C	265
Coefficient of thermal expansion <sup>c</sup> , -30 to 90°C	D-696	m/mK	1.7x10 <sup>-5</sup>
UL Flammability <sup>d</sup> , t~0.8mm	UL-94	-	V-0
<b>Electrical</b>			
Dielectric strength, t=1.6mm	D-149	kv/mm	18
Dielectric constant, 1MHz	D-150	-	5
Dissipation factor, 1MHz	D-150	-	0.008
Comparative tracking index (CTI)	D-3638	Volt	275
Arc resistance	D-495	sec.	190
Volume resistibility	D-257	Ohm.cm	10 <sup>16</sup>
<b>Process Conditions</b>			
Cylinder temperature	-	°C	300-340
Mold temperature	-	°C	120-150

a: MD; Mold direction, TD; Transverse direction, b: P=150KPa, V=0.3m/s, PPS vs. carbon steel,  
c: Average value of MD & TD, d: UL file No. E53829



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