

FZ-820-DE

- **Out line:** FZ-820-DE is 20% glass fiber filled tough PPS compounds which provide excellent flow ability, electrical insulation, thermal shock resistance and adhesive bonding with epoxy resin.
- **Color:** Black

Engineering Properties of FZ-820-DE

Properties	Test Method	Unit	FZ-820-DE
General Information			
	<ASTM>		GF & others Super Tough Adhesive Bonding High Flow
Physical			
Specific gravity	D-792	-	1.42
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt. %	0.02
Mold shrinkage, MD /TD ^a	D-955	%	0.32/1.2
Mechanical			
Tensile strength	D-638	MPa	135
Tensile modulus	D-638	MPa	7500
Tensile elongation at break	D-638	%	2.1
Poisson's ratio	-	-	0.37
Flexural strength	D-790	MPa	180
Flexural modulus	D-790	MPa	6600
Flexural elongation at break	D-790	%	3.4
Izod impact strength notched / un notched	D-256	J/m	100/650
Compressive strength	D-695	MPa	170
Rockwell hardness, R/M	D-785	-	118/84
Coefficient of friction ^b , static /dynamic	-	-	0.35/0.35
Thermal			
Distortion temp. of under load, 1.82MPa	D-648	°C	230
Coefficient of thermal expansion ^c , -30 to 90°C	D-696	m/mK	3.5x10 ⁻⁵
UL Flammability, t~0.8mm	UL-94	-	V-1 ^d -
Electrical			
Dielectric strength, t=1.6mm	D-149	kv/mm	24
Dielectric constant, 1MHz	D-150	-	4
Dissipation factor, 1MHz	D-150	-	0.002
Comparative tracking index (CTI)	D-3638	Volt	180
Arc resistance	D-495	sec.	120
Volume resistibility	D-257	Ohm.cm	10 ¹⁶
Process Conditions			
Cylinder temperature	-	°C	290-320
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: Own Data



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