

FZ-830

- **Out line:** FZ-830 is a glass fiber filled PPS compound that is developed to provide a excellent adhesive bonding with epoxy resin, toughness and strength.
- **Color:** Black

Engineering Properties of FZ-830

Properties	Test Method	Unit	FZ-830
General Information		<ASTM>	GF & Others Adhesive Bonding
Physical			
Specific gravity	D-792	-	1.50
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt. %	0.03
Mold shrinkage, MD /TD ^a	D-955	%	0.28/1.2
Mechanical			
Tensile strength	D-638	MPa	140
Tensile modulus	D-638	MPa	9500
Tensile elongation at break	D-638	%	1.7
Poisson's ratio	-	-	0.35
Flexural strength	D-790	MPa	200
Flexural modulus	D-790	MPa	9000
Flexural elongation at break	D-790	%	2.5
Izod impact strength notched / un notched	D-256	J/m	100/700
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	245
Coefficient of thermal expansion ^c , -30 to 90°C	D-696	m/mK	2.5x10 ⁻⁵
UL Flammability, t~1.6mm	UL-94	-	V-1 ^d -
Electrical			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Dielectric constant, 1MHz	D-150	-	3.5
Dissipation factor, 1MHz	D-150	-	0.002
Comparative tracking index (CTI)	D-3638	Volt	-
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



★Please refer to Material Safety Data Sheet for safety precautions prior to use. The information contained in this data sheet is based on tests or research DIC Corporation ('DIC') believes to be reliable, but no warranty is given by DIC concerning the accuracy or completeness thereof. The supply of the information does not release the recipient from the obligation to test the products as to their suitability for the intended applications and processes. DIC has no liability for any consequence of the application, processing or use of the information or the products. Information concerning the application of the products is not and should not be construed as a warranty as to non-infringement of intellectual property for a particular application.