DIC Corporation
EP Division
7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233
Tel.+81-3-3278-9905 Fax.+81-3-3278-1844

DIC.PPS
Polyphenylene Sulfide

January, 2010

FZ-2140

■ **Outline: FZ-2140 is a 40% glass fiber reinforced linear polyphenylene sulfide compound that is well balanced with excellent engineering properties and processability.**

■ **Color: Black**

Engineering Properties of FZ-2140

Properties	Test Method	Unit	FZ-2140
General Information	<ASTM>		GF40% GP
Physical			
Specific gravity	D-792	-	1.66
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt.%	0.02
Mold shrinkage, MD /TD [a]	D-955	%	0.25/1.1
Mechanical			
Tensile strength	D-638	MPa	180
Tensile modulus	D-638	MPa	14000
Tensile elongation at break	D-638	%	1.8
Poisson's ratio	-	-	0.36
Flexural strength	D-790	MPa	270
Flexural modulus	D-790	MPa	13000
Flexural elongation at break	D-790	%	2.5
Izod impact strength notched / un notched	D-256	J/m	100/550
Compressive strength	D-695	MPa	200
Rockwell hardness, R/M	D-785	-	121/100
Coefficient of friction [b], static /dynamic	-	-	0.35/0.35
Thermal			
HDT A, 1.82MPa	D-648	℃	265
Coefficient of thermal expansion [c], -30 to 90℃	D-696	m/mK	2.2×10^{-5}
UL Flammability [d], t~0.8mm	UL-94	-	V-0
Electrical			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Dielectric constant, 1MHz	D-150	-	4
Dissipation factor, 1MHz	D-150	-	0.002
Comparative tracking index (CTI)	D-3638	Volt	170
Arc resistance	D-495	sec.	125
Volume resistibility	D-257	Ohm.cm	10^{16}
Process Conditions			
Cylinder temperature	-	℃	300-340
Mold temperature	-	℃	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