

FZ-1140

■ Out line: FZ-1140 is a 40% glass fiber reinforced polyphenylene sulfide compound that is well balanced the excellent engineering properties and process ability.

■ Color: Black and Natural (Brown)

Engineering Properties of FZ-1140

Properties	Test Method	Unit	FZ-1140
General Information			GF40% GP
<ASTM>			
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	15000
Tensile elongation at break	D-638	%	1.7
Poisson's ratio	-	-	0.36
Flexural strength	D-790	MPa	265
Flexural modulus	D-790	MPa	13500
Flexural elongation at break	D-790	%	2.2
Izod impact strength	D-256	J/m	
notched / un notched			100/500
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			
Distortion temp. of under load, 1.82MPa	D-648	°C	265
Coefficient of thermal expansion ^c , -30 to 90°C	D-648	m/mK	2.2x10 ⁻⁵
UL Flammability ^d	UL-94	-	V-0 ^e
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	-	°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, e: t~0.4mm

Sep.2005



DAINIPPON INK AND CHEMICALS, INCORPORATED

Engineering Plastics Division

■ HQ. & Tokyo Sales Office TEL:03-3278-9905 FAX:03-3278-1844

■ Osaka Sales Office TEL:06-6252-953 FAX:06-6252-8762

■ Nagoya Sales Office TEL:052-951-0703 FAX:052-961-2856

★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 Dainippon Ink & Chemicals, Inc.('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.