

# FZ-1130-D5

- **Outline: FZ-1130-D5 is a glass fiber 30% reinforced polyphenylene sulfide compound with reduced flash and improved flexibility compared to conventional grades.**
- **Color: Black and Natural (Brown).**

Engineering Properties of FZ-1130-D5

Properties	Test Method	Unit	FZ-1130-D5
General Information	<ASTM>		GF30% Low flash & Tough
<b>Physical</b>			
Specific gravity	D-792	-	1.56
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt.%	0.02
Mold shrinkage, MD /TD <sup>a</sup>	D-955	%	0.27/1.2
<b>Mechanical</b>			
Tensile strength	D-638	MPa	175
Tensile modulus	D-638	MPa	11000
Tensile elongation at break	D-638	%	1.9
Poisson's ratio	-	-	0.36
Flexural strength	D-790	MPa	240
Flexural modulus	D-790	MPa	10000
Flexural elongation at break	D-790	%	2.5
Izod impact strength notched / un notched	D-256	J/m	95/550
Compressive strength	D-695	MPa	190
Rockwell hardness, R/M	D-785	-	121/100
Coefficient of friction <sup>b</sup> , static /dynamic	-	-	0.35/0.35
<b>Thermal</b>			
HDT A, 1.82MPa	D-648	°C	265
Coefficient of thermal expansion <sup>c</sup> , -30 to 90°C	D-696	m/mK	2.3x10 <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	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.	120
Volume resistivity	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

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.

