

# Z-230

- **Outline:** Z-230 is a 30% glass fiber reinforced super tough PPS compound that provides excellent impact, thermal shock, and hot water resistance.
- **Color:** Black

## Engineering Properties of Z-230

Properties	Test Method	Unit	Z-230
General Information			GF30% Super tough
<ASTM>			
<b>Physical</b>			
Specific gravity	D-792	-	1.53
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt.%	0.02
Mold shrinkage, MD /TD <sup>a</sup>	D-955	%	0.30/1.2
<b>Mechanical</b>			
Tensile strength	D-638	MPa	155
Tensile modulus	D-638	MPa	9300
Tensile elongation at break	D-638	%	2.4
Poisson's ratio	-	-	0.36
Flexural strength	D-790	MPa	220
Flexural modulus	D-790	MPa	8500
Flexural elongation at break	D-790	%	3.2
Izod impact strength notched / un notched	D-256	J/m	140/750
Compressive strength	D-695	MPa	150
Rockwell hardness, R/M	D-785	-	118/—
Coefficient of friction <sup>b</sup> , static /dynamic	-	-	—
<b>Thermal</b>			
HDT A, 1.82MPa	D-648	°C	255
Coefficient of thermal expansion <sup>c</sup> , -30 to 100°C	D-696	m/mK	2.2x10 <sup>-5</sup>
UL Flammability <sup>d</sup> , t~1.6mm	UL-94	-	V-0
<b>Electrical</b>			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Dielectric constant, 1MHz	D-150	-	5
Dissipation factor, 1MHz	D-150	-	0.005
Comparative tracking index (CTI)	D-3638	Volt	—
Arc resistance	D-495	sec.	—
Volume resistibility	D-257	Ohm.cm	10 <sup>16</sup>
<b>Process Conditions</b>			
Cylinder temperature	-	°C	290-320
Mold temperature	-	°C	120-150

a: MD; 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.