

Z-650

- **Out line:** Z-650 is a glass fiber and mineral filled super tough PPS compound which provides excellent impact, thermal shock, hot water resistances and is improved dimensional stability.
- **Color:** Black

Engineering Properties of Z-650

Properties	Test Method	Unit	Z-650
General Information	<ASTM>		GF & Filler Super tough
Physical			
Specific gravity	D-792	-	1.72
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt. %	0.02
Mold shrinkage, MD /TD ^a	D-955	%	0.25/1.0
Mechanical			
Tensile strength	D-638	MPa	165
Tensile modulus	D-638	MPa	14500
Tensile elongation at break	D-638	%	2.0
Poisson's ratio	-	-	0.35
Flexural strength	D-790	MPa	235
Flexural modulus	D-790	MPa	13000
Flexural elongation at break	D-790	%	2.2
Izod impact strength notched / un notched	D-256	J/m	100/620
Compressive strength	D-695	MPa	170
Rockwell hardness, R/M	D-785	-	118/ —
Coefficient of friction ^b , static /dynamic	-	-	—
Thermal			
Distortion temp. of under load, 1.82MPa	D-648	°C	255
Coefficient of thermal expansion, -30 to 100°C	D-696	m/mK	2.0x10 ⁻⁵
UL Flammability ^c , t~1.6mm	UL-94	-	V-0
Electrical			
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 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: UL file No. E53829



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