

Z-230 BLACK-2(B)

- **Product Summary:** Z-230 Black-2(B) is a 30% glass fiber reinforced super tough PPS compound with excellent impact, thermal shock, hot water resistance and less outgas compared to Z-230.
- **Color:** Black

Engineering Properties of Z-230 BLACK-2(B)

Properties	Test Method	Unit	Z-230 BLACK-2(B)
General Information			GF30% Super tough Low outgas
Physical			
Density	ISO 1183	g/cm ³	1.56
Water absorption, 23°C /24hrs.	ISO 62	%	0.02
Mold shrinkage ^a	ISO 294-4	%	0.3/0.8
Mechanical			
Tensile strength	ISO 527-1,2	MPa	160
Tensile modulus	ISO 527-1,2	GPa	12.0
Tensile strain at break	ISO 527-1,2	%	2.0
Flexural strength	ISO 178	MPa	250
Flexural modulus	ISO 178	GPa	11.0
Flexural strain at break	ISO 178	%	2.5
Charpy impact strength, notched	ISO 179/1eA	kJ/m ²	10
unnotched	ISO 179/1eU	kJ/m ²	58
Co-eff. of friction ^b , static/dynamic	-	-	-
Thermal			
Heat deflection temperature, 1.80MPa	ISO 75-1,2	°C	265
Co-eff. of linear thermal expansion ^a , -50~50 °C	ISO 11359-2	x 10 ⁻⁵ /K	1.5/5.0
Co-eff. of linear thermal expansion ^a , 100~200 °C	ISO 11359-2	x 10 ⁻⁵ /K	1.5/13.0
Flammability ^c /thickness (mm)	UL-94	-	-
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	27
Dielectric constant, 1MHz	IEC 60250	-	4
Dissipation factor, 1MHz	IEC 60250	-	0.004
Comparative Tracking Index (CTI)	IEC 60112	V	175
Volume resistivity	IEC 60093	Ω·cm	10 ¹⁶
Molding Condition			
Cylinder temperature	-	°C	290-320
Mold temperature	-	°C	130-150

a: Flow direction/Transverse direction

b: P=150kPa, V=0.3m/s, PPS vs. carbon steel

c: UL file No. E53829