

Z-650-B2 Black

■ **Out line:** Z-650-B2 Black is a glass fiber and mineral reinforced super tough PPS compound which provide excellent impact, thermal shock and hot water resistances as well as improved dimensional stability and mold flow.

■ **Color:** Black

Engineering Properties of Z-650-B2 Black

| Properties | Test Method | Unit | Z-650-B2 Black |
|---|--------------|-------------------|--|
| General Information | <ISO> | | GF/mineral Super Tough High Flow |
| Physical | | | |
| Specific gravity | ISO 1183/A | - | 1.72 |
| Water absorption, 23deg. /24Hrs. /in water | ISO 62 | Wt.% | 0.02 |
| Mold shrinkage, MD /TD ^a | Own Method | % | 0.25/1.0 |
| Mechanical | | | |
| Tensile strength | ISO 527-1,-2 | MPa | 175 |
| Tensile modulus | ISO 527-1,-2 | MPa | 15200 |
| Tensile elongation at break | ISO 527-1,-2 | % | 2.0 |
| Flexural strength | ISO 178 | MPa | 260 |
| Flexural modulus | ISO 178 | MPa | 14800 |
| Charpy notched impact strength | ISO 179-1eA | kJ/m ² | 10 |
| Rockwell hardness, R/M | ISO 2039-2 | - | R118 |
| Coefficient of friction ^b , static /dynamic | - | - | - |
| Thermal | | | |
| Deflection temp. of under load, 1.82MPa | ISO 75-1,-2 | °C | 255 |
| Coefficient of thermal expansion ^c , -30 to 90°C | ISO 11359-2 | m/mK | 2.0x10 ⁻⁵ |
| UL Flammability ^d , t~1.5mm | UL-94 | - | V-0 |
| Electrical | | | |
| Dielectric strength, t=1.0mm | IEC 60243-1 | kv/mm | 23 |
| Dielectric constant, 1MHz | IEC 60250 | - | 5 |
| Dissipation factor, 1MHz | IEC 60250 | - | 0.005 |
| Comparative tracking index (CTI) | IEC 60112 | Volt | 200 |
| Arc resistance | ASTM D495 | sec. | 120 |
| Volume resistibility | IEC 60093 | 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: Average value of MD & TD, d: UL file No. E53829