





## **Z-650 BLACK-U**

■ Product Summary: Z-650 BLACK-U is a glass fiber and mineral filled super tough PPS compound with excellent impact, thermal shock, hot water resistance and improved dimensional stability.

■ Color: Black

**Engineering Properties** 

Properties	Test Method	Unit	Typical value
General Information			GF/Filler Super Tough
Physical			
Density Water absorption, 23°C /24hrs. Mold shrinkage <sup>a</sup> Mechanical	ISO 1183-1 ISO 62 ISO 294-4	g/cm³ % %	1.73 0.02 0.3/0.7
	ISO 527 1 2	MDo	175
Tensile strength Tensile modulus Tensile strain at break Flexural strength Flexural modulus Flexural strain at flexural strength Charpy impact strength, notched unnotched Co-eff. of friction b, static/dynamic  Thermal  Temperature of deflection under load, 1.80MPa Co-eff. of linear thermal expansion a, -50~50 °C	ISO 527-1,2 ISO 527-1,2 ISO 527-1,2 ISO 178 ISO 178 ISO 179/1eA ISO 179/1eU - ISO 75-1,2 ISO 11359-2	MPa GPa % MPa GPa % kJ/m² kJ/m² - C x 10 <sup>-5</sup> /K	175 16.5 1.6 275 16.0 1.9 9 50 -
Co-eff. of linear thermal expansion a, 100~200 °C Flammability c/thickness (mm)	ISO 11359-2 UL-94	x 10 <sup>-5</sup> /K	1.5/9.0 V-0/1.5
Electrical	OL UT		v 0/ 1.5
Electric strength, t=1.0mm Relative permittivity, 1MHz Dielectric dissipation factor, 1MHz Comparative Tracking Index (CTI) Volume resistivity	IEC 60243-1 IEC 62631-2-1 IEC 62631-2-1 IEC 60112 IEC 62631-3-1	kV/mm - - V Ω·cm	23 5 0.005 175 10 <sup>16</sup>
Molding Condition			
Cylinder temperature Mold temperature	-	°C	290-320 130-150

a: Flow direction/Transverse direction

## **DIC** Corporation

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

c: UL file No. E53829