

March, 2024

FZ-840-D1 BLACK

■ FZ-840-D1 BLACK is a glass fiber and mineral filled PPS compound formulated for provides toughness and good adhesion to bonding agents.

■ Color: Black

Engineering Properties

Properties	Test Method	Unit	Typical value
General Information			GF/Filler Adhesion
Physical			
Density Water absorption, 23°C/24Hrs. Mold shrinkage ^a	ISO 1183-1 ISO 62 ISO 294-4	g/cm³ % %	1.66 0.02 0.3/0.7
Mechanical			
Tensile strength Tensile modulus Tensile strain at break Flexural strength Flexural modulus Flexural strain at flexural strength Charpy impact strength, notched unnotched Thermal Heat deflection temperature, 1.80MPa Co-eff. of linear thermal expansion a, -50~50 °C Co-eff. of linear thermal expansion a, 100~200 °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 ISO 11359-2	MPa GPa % MPa GPa % kJ/m² kJ/m² °C x 10-5/K x 10-5/K	160 12 1.8 250 213 2.0 7 35
Flammability ^c /thickness (mm)	UL-94	X 10°/K -	- V-0/0.8
Electrical			
Electric strength, t=1.0mm Relative permittivity, 1MHz Dielectric dissipation factor, 1MHz Volume resistivity	IEC 60243-1 IEC 62631-2-1 IEC 62631-2-1 IEC 62631-3-1	kV/mm - - Ω·cm	23 - - 10 ¹⁶
Molding Condition			
Cylinder temperature Mold temperature	-	°C	290-320 130-150

a: Flow direction/Transverse direction

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

c: UL file No. E53829