





FZ-2140-F3 BLACK-U

- Product Summary: FZ-2140-F3 BLACK-U is a 40% glass fiber reinforced linear PPS compound with excellent mechanical properties that may suitably be used for applications where directly contacting to food and drinking water.
- Color: Black

Engineering Properties

Properties	Test Method	Unit	Typical value
General Information			GF40% Food contact
Physical			
Density Water absorption, 23°C/24Hrs. Mold shrinkage ^a Mechanical	ISO 1183-1 ISO 62 ISO 294-4	g/cm³ % %	1.67 0.01 0.3/0.7
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	ISO 527-1,2 ISO 527-1,2 ISO 527-1,2 ISO 178 ISO 178 ISO 178	MPa GPa % MPa GPa % kJ/m² kJ/m²	190 16.0 1.8 280 14.5 2.1 10 50 0.35/0.35
Thermal			
Temperature of deflection under load, 1.80MPa Co-eff. of linear thermal expansion ^a , -50~50 °C Co-eff. of linear thermal expansion ^a , 100~200 °C Flammability ^c /thickness (mm)	ISO 75-1,2 ISO 11359-2 ISO 11359-2 UL-94	°C x 10 ⁻⁵ /K x 10 ⁻⁵ /K -	270 1.5/4.0 1.5/10.5 V-0/0.75
Electrical			
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	26 4 0.003 175 10 ¹⁶
Molding Condition			
Cylinder temperature Mold temperature	-	°C	300-340 130-150

a: Flow direction/Transverse direction

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Please refer to Safety Data Sheet for safety precautions prior to use. The information contained in this data sheet is based on tests or research DIC Corporation ('DIC') believes to be reliable, but no warranty is given by DIC concerning the accuracy or completeness thereof. The supply of the information does not release the recipient from the obligation to test the products as to their suitability for the intended applications and processes. DIC has no liability for any consequence of the application, processing or use of the information or the products. Information concerning the application of the products is not and should not be construed as a warranty as to non-infringement of intellectual property for a particular application.

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

c: UL file No. E53829