





CZ-1130

■ Product Summary: CZ-1130 is a 30% PAN based carbon fiber reinforced PPS compound with excellent mechanical properties and low friction and wear properties.

■ Color: Black

Engineering Properties

Dranartica	Description Total Makked Unit Total column			
Properties General Information	Test Method	Unit	Typical value PAN-CF30% Low wear Conductive	
Physical				
Density Water absorption, 23°C /24hrs. Mold shrinkage ^a Mechanical	ISO 1183-1 ISO 62 ISO 294-4	g/cm³ % %	1.46 0.02 0.1/0.4	
Tensile strength	ISO 527-1,2	MPa	215	
Tensile modulus	ISO 527-1,2	GPa	30.0	
Tensile strain at break	ISO 527-1,2	%	0.8	
Flexural strength	ISO 178	MPa	325	
Flexural modulus	ISO 178	GPa	26.0	
Flexural strain at flexural strength	ISO 178	%	1.3	
Charpy impact strength,	100 170	,,	1.0	
notched	ISO 179/1eA	kJ/m²	5	
unnotched	ISO 179/1eU	kJ/m²	32	
Co-eff. of friction b, static/dynamic	-	-	0.25/0.25	
Thermal				
Temperature of deflection under load, 1.80MPa	ISO 75-1,2	°C	275	
Co-eff. of linear thermal expansion a, -50~50 °C	ISO 11359-2	x 10 ⁻⁵ /K	0.5/4.5	
Co-eff. of linear thermal expansion ^a , 100~200 °C	ISO 11359-2	x 10 ⁻⁵ /K	0.5/10.0	
Flammability ^c /thickness (mm)	UL-94	-	V-0 equivalent/0.69	
Electrical				
Electric strength, t=1.0mm	IEC 60243-1	kV/mm	-	
Relative permittivity, 1MHz	IEC 62631-2-1	-	-	
Dielectric dissipation factor, 1MHz	IEC 62631-2-1	-	-	
Comparative Tracking Index (CTI)	IEC 60112	V	-	
Volume resistivity	IEC 62631-3-1	$\Omega \cdot cm$	10 ⁰	
Molding Condition				
Cylinder temperature	-	°C	300-340	
Mold temperature	-	°C	130-150	

a: Flow direction/Transverse direction

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

c: Own data