Color & Comfort

DIC.PPS
Polyphenylene Sulfide

October, 2016

FZ-1130-D5

- **Product Summary: FZ-1130-D5 is a glass fiber 30% reinforced branched PPS compound with reduced flash and improved flexibility compared to conventional grades of PPS.**
- **Color: Black and Natural (Brown)**

Engineering Properties of FZ-1130-D5

Properties	Test Method	Unit	FZ-1130-D5
General Information			GF30% Low flash
Physical			
Density	ISO 1183	g/cm³	1.59
Water absorption, 23˚C /24hrs.	ISO 62	%	0.02
Mold shrinkage [a]	ISO 294-4	%	0.3/0.8
Mechanical			
Tensile strength	ISO 527-1,2	MPa	180
Tensile modulus	ISO 527-1,2	GPa	13.5
Tensile strain at break	ISO 527-1,2	%	1.7
Flexural strength	ISO 178	MPa	265
Flexural modulus	ISO 178	GPa	12.0
Flexural strain at break	ISO 178	%	2.3
Charpy impact strength,			
notched	ISO 179/1eA	kJ/m²	9
unnotched	ISO 179/1eU	kJ/m²	40
Co-eff. of friction [b], static/dynamic	-	-	0.35/0.35
Thermal			
Heat deflection temperature, 1.80MPa	ISO 75-1,2	˚C	265
Co-eff. of linear thermal expansion [a], -50~50 ˚C	ISO 11359-2	x 10^{-5}/K	1.5/4.5
Co-eff. of linear thermal expansion [a], 100~200 ˚C	ISO 11359-2	x 10^{-5}/K	1.5/12.5
Flammability [c]/thickness (mm)	UL-94	-	V-0/0.75
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	25
Dielectric constant, 1MHz	IEC 60250	-	4
Dissipation factor, 1MHz	IEC 60250	-	0.004
Comparative Tracking Index (CTI)	IEC 60112	V	175
Volume resistivity	IEC 60093	Ω·cm	10^{16}
Molding Condition			
Cylinder temperature	-	˚C	300-340
Mold temperature	-	˚C	130-150

a: Flow direction/Transverse direction
b: P=150kPa, V=0.3m/s, PPS vs. carbon steel
c: UL file No. E53829

DIC Corporation