Color & Comfort

DIC.PPS
Polyphenylene Sulfide

June, 2024

FZ-8600

■ **Product Summary: FZ-8600 is a glass fiber and mineral filled PPS compound with excellent surface flatness, and is suitable for use in applications such as lamp reflectors.**

■ **Color: Black**

Engineering Properties

Properties	Test Method	Unit	Typical value
General Information			GF/Filler Surface flatness
Physical			
Density	ISO 1183-1	g/cm³	1.90
Water absorption, 23˚C/24Hrs.	ISO 62	%	0.01
Mold shrinkage [a]	ISO 294-4	%	0.6/0.7
Mechanical			
Tensile strength	ISO 527-1,2	MPa	90
Tensile modulus	ISO 527-1,2	GPa	13.0
Tensile strain at break	ISO 527-1,2	%	0.8
Flexural strength	ISO 178	MPa	130
Flexural modulus	ISO 178	GPa	12.0
Flexural strain at break	ISO 178	%	1.1
Charpy impact strength,			
notched	ISO 179/1eA	kJ/m²	3
unnotched	ISO 179/1eU	kJ/m²	14
Co-eff. of friction [b], static/dynamic	-	-	0.35/0.35
Thermal			
Heat deflection temperature, 1.80MPa	ISO 75-1,2	˚C	255
Co-eff. of linear thermal expansion [a], -50~50 ˚C	ISO 11359-2	x 10^{-5}/K	2.0/2.5
Co-eff. of linear thermal expansion [a], 100~200 ˚C	ISO 11359-2	x 10^{-5}/K	3.0/7.5
Flammability [c]/thickness (mm)	UL-94	-	-
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	20
Dielectric constant, 1MHz	IEC 60243-2-1	-	5
Dissipation factor, 1MHz	IEC 60243-2-1	-	0.002
Comparative Tracking Index (CTI)	IEC 60112	V	225
Volume resistivity	IEC 60243-3-1	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

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