Color & Comfort

DIC.PPS
Polyphenylene Sulfide

April, 2024

Z-650-TS BLACK

- **Product Z-650-TS is a glass fiber and mineral filled super tough PPS compound that provides excellent impact and thermal shock resistance.**
- **Color: Black**

Engineering Properties

Properties	Test Method	Unit	Typical value
General Information			GF/Filler Super tough, Thermal shock
Physical			
Density	ISO 1183-1	g/cm^3	1.69
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	165
Tensile modulus	ISO 527-1,2	GPa	14.5
Tensile strain at break	ISO 527-1,2	%	2
Flexural strength	ISO 178	MPa	260
Flexural modulus	ISO 178	GPa	14
Flexural strain at break	ISO 178	%	2
Charpy impact strength,			
notched	ISO 179/1eA	kJ/m^2	10
unnotched	ISO 179/1eU	kJ/m^2	50
Thermal			
Heat deflection temperature, 1.80MPa	ISO 75-1,2	˚C	270
Co-eff. of linear thermal expansion [a], -50~50 ˚C	ISO 11359-2	x 10^{-5}/K	1.5/4.0
Co-eff. of linear thermal expansion [a], 100~200 ˚C	ISO 11359-2	x 10^{-5}/K	1.0/10.5
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	26
Dielectric constant, 1MHz	IEC 62631-2-1	-	-
Dissipation factor, 1MHz	IEC 62631-2-1	-	-
Comparative Tracking Index (CTI)	IEC 60112	V	175
Volume resistivity	IEC 62631-3-1	Ω･cm	10^{16}
Molding Condition			
Cylinder temperature	-	˚C	290-320
Mold temperature	-	˚C	130-150

a: Flow direction/Transverse direction

DIC Corporation