



May, 2024

Z-650-HN BLACK

■ Product Z-650-HN is a glass fiber and mineral filled super tough PPS compound that provides excellent impact, thermal shock resistance and improved flow property.

■ Color: Black

Engineering Properties

Engineering Properties			
Properties	Test Method	Unit	Typical value
General Information			GF/Filler Super tough, High flow
Physical			
Density	ISO 1183-1	g/cm³	1.71
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	13.5
Tensile strain at break	ISO 527-1,2	%	1.8
Flexural strength	ISO 178	MPa	260
Flexural modulus	ISO 178	GPa	14.0
Flexural strain at break	ISO 178	%	2.1
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	${\mathbb C}$	265
Co-eff. of linear thermal expansion a, -50~50 ℃	ISO 11359-2	x 10 ⁻⁵ /K	1.5/4.0
Co-eff. of linear thermal expansion a, 100~200 ℃	ISO 11359-2	x 10 ⁻⁵ /K	1.0/10.0
Electrical			
Electric strength, t=1.0mm	IEC 60243-1	kV/mm	26
Relative permittivity, 1MHz	IEC 62631-2-1	-	5
Dielectric dissipation factor, 1MHz	IEC 62631-2-1	-	0.005
Comparative Tracking Index (CTI)	IEC 60112	V	175
Volume resistivity	IEC 62631-3-1	Ω·cm	10 ¹⁶
Molding Condition			
Cylinder temperature	-	${\mathbb C}$	290-320
Mold temperature	-	${\mathbb C}$	130-150

a: Flow direction/Transverse direction

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