

Ecotran[®] E5050G

Polyphenylene sulfide

Outline : Ecotran E5050G is a glass fiber and mineral filled PPS compound developed to provide high strength.

	Method	Unit	E5050G
General Information			GF/MD 55% Strength
Physical properties			
Density	ISO 1183/A	g/cm ³	1.81
Water absorption	ISO 62	%	0.02
Mold shrinkage (MD/TD)_ 100x100x 3mm	HDC Method	%	0.3 / 0.65
Mechanical properties			
Tensile strength	ISO 527-1, -2	MPa	165
Tensile elongation at break	ISO 527-1, -2	%	1.1
Flexural strength	ISO 178	MPa	260
Flexural modulus	ISO 178	MPa	18,000
Charpy impact strength (notched)	ISO 179/1eA	kJ/m ²	8
Charpy impact strength (unnotched)	ISO 179/1eU	kJ/m ²	30
Rockwell hardness	ISO 2039/2	R-Scale	121
Thermal properties			
Melting temperature	ISO 11357	°C	280
Coefficient of thermal expansion (MD)	ISO 11359-1, -2	μm/m.°C	14
Heat Deflection temperature, 1.82Mpa	ISO 75-1, -2/A	°C	>260
Flammability (T=0.8mm)	UL94	Class	V-0
Electrical properties			
Dielectric strength (T=1.0mm)	IEC 60243-1	kV/mm	23
Dielectric constant, 1MHz	IEC 60250	-	5
Dielectric factor, 1MHz	IEC 60250	-	0.002
Comparative tracking index (CTI)	IEC 60112	Volt	150
Volume resistivity	IEC 60093	Ohm-cm	10 ¹⁶
Processing Conditions			
Pre-drying	-	-	130°C / 4hr
Cylinder temperature	-	°C	280 - 330
Mold temperature	-	°C	130 - 150

* The information provided in this data sheet is based on HDC POLYALL's knowledge and test method, so it can not be used as guaranteed specification limits.