

Ecotran[®] E1040S

Polyphenylene sulfide

Outline : Ecotran E1040S is a general PPS compound grade filled with 40% glass fiber

	Method	Unit	E1040S NC	E1040S BK
General Information			GF40% High strength	
Physical properties				
Density	ISO 1183/A	g/cm ³	1.67	1.67
Water absorption	ISO 62	%	0.02	0.02
Mold shrinkage (MD/TD)	ISO 294-4	%	0.3/0.55	0.3/0.55
Mechanical properties				
Tensile strength	ISO 527-1, -2	MPa	195	190
Tensile elongation at break	ISO 527-1, -2	%	1.5	1.5
Flexural strength	ISO 178	MPa	290	285
Flexural modulus	ISO 178	GPa	14.5	14.5
Charpy impact strength (notched/unnotched)	ISO 179/1eA,U	kJ/m ²	9.5 / 45	9.0 / 40
Rockwell hardness	ISO 2039/2	R-Scale	121	121
Thermal properties				
Melting temperature	ISO 11357	°C	280	280
Heat Deflection temperature, 1.82Mpa	ISO 75-1, -2/A	°C	265	265
Flammability (T=0.3mm)	UL 94	class	V-0	V-0
Electrical properties				
Dielectric strength (T=1.0mm)	IEC 60243-1	kv/mm	28	28
Dielectric constant, 1MHz	IEC 60250	-	3.8	3.8
Dielectric factor, 1MHz	IEC 60250	-	0.0016	0.0016
Comparative tracking index (CTI)	IEC 60112	Volt	175	175
Arc resistance	ASTM D495	sec.	125	125
Volume resistivity	IEC 60093	Ohm.cm	10 ¹⁶	10 ¹⁶
Processing Conditions				
Pre-drying		-	130°C / 4hr	130°C / 4hr
Cylinder temperature		°C	280 - 330	280 - 330
Mold temperature		°C	130 - 150	130 - 150

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