

Ecotran[®] E1040ST

Polyphenylene sulfide

Outline : Ecotran E1040ST is a glass fiber filled PPS compound developed to provide high impact strength

	Method	Unit	E1040ST NC	E1040ST BK
General Information			GF 40%	
			High impact strength	
Physical properties				
Density	ISO 1183/A	g/cm3	1.62	1.62
Water absorption	ISO 62	%	0.02	0.02
Mold shrinkage (MD/TD)	ISO 294-4	%	0.25 / 0.6	0.25 / 0.6
Mechanical properties				
Tensile strength	ISO 527-1, -2	MPa	200	185
Tensile elongation at break	ISO 527-1, -2	%	1.9	1.8
Flexural strength	ISO 178	MPa	300	285
Flexural modulus	ISO 178	GPa	13	13
Charpy impact strength (notched)	ISO 179/1eA	kJ/m ²	11.5	11
Charpy impact strength (unnotched)	ISO 179/1eU	kJ/m ²	65	58
Rockwell hardness	ISO 2039/2	R-Scale	120	120
Thermal properties				
Melting temperature	ISO 11357	°C	280	
Heat Deflection temperature, 1.82Mpa	ISO 75-1, -2/A	°C	265	
Flammability (T=0.5mm)	UL 94	class	V-0	
Electrical properties				
Dielectric strength (T=1.0mm)	IEC 60243-1	kv/mm	28	
Dielectric constant, 1MHz	IEC 60250	-	3.8	
Dissipation factor, 1MHz	IEC 60250	-	0.0016	
Comparative tracking index (CTI)	IEC 60112	Volt	175	
Arc resistance	ASTM D495	sec.	125	
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 test method, so it can not be used as guaranteed specification limits.