

Typical Properties

metastar[®] YT510

Nominal Thickness	mil	2	3	5	7	10	12	15	20	30	Test Method
	mm	0.05	0.08	0.13	0.18	0.25	0.30	0.38	0.51	0.76	
Typical Thickness	mil	2.2	3.1	5.2	7.2	10.2	12.2	15.2	20.3	30.4	GB/T451.3-2002
	mm	0.06	0.08	0.13	0.18	0.26	0.31	0.39	0.51	0.77	
Basis Weight	g/m ²	41	63	116	175	249	309	397	530	780	GB/T451.2-2002
Density	g/cc	0.74	0.80	0.87	0.95	0.96	1.01	1.03	1.04	1.01	
Tensile Strength N/cm	MD	39	68	140	220	265	350	436	579	700	GB/T12914-2008
	CD	16	30	58	105	168	200	260	355	450	
Elongation %	MD	6.5	8.5	11.0	12.0	13.5	15.5	14.0	12.5	12.0	
	CD	7.0	9.0	12.0	12.5	14.0	16.0	15.0	13.5	12.5	
Elmendorf Tear N	MD	0.7	0.9	2.4	3.8	6.0	7.5	9.5	14.0	N/A	GB/T455-2002
	CD	1.2	1.8	3.8	6.5	10.0	13.5	17.0	23.5	N/A	
Dielectric Strength	V/mil	375	400	450	500	550	575	500	475	475	GB/T1408.1-2006
	kV/mm	13	14	18	19	21	22	20	16	16	
Dielectric Constant ¹⁾	50Hz	1.5	1.5	2.1	2.4	2.5	2.7	3.0	3.1	3.2	GB/T1409-2006
Dissipation Factor ²⁾	50Hz ×10 ⁻³	4	5	6	7	8	8	8	8	8	
Shrinkage at 300℃ %	MD	3.5	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	IEC60819-2:2002
	CD	3.0	3.0	2.5	2.5	2.5	2.5	2.5	2.0	2.0	

MD=Machine Direction; CD=Cross Direction

* 1) Frequency 50Hz, rapid rise ; 2)Using 50-mm electrodes, frequency 50Hz。

NOTE : The properties in this technical data sheet are typical values and should not be used as specification limits. Unless otherwise noted, all properties were measured in air under “standard” conditions (in equilibrium at 23°C, 50% relative humidity).This information may be subject to revision as new knowledge and experience become available.