



SML Films Ltd.



Plot No.A/17-1,  
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Opp. G-3 Fabricator,  
Near Ichhapore char rasta, Surat  
Gujarat, India

## SM 500 T

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**DESCRIPTION** : SM 500 T, Grade film is a co-extruded corona treated bi-axially oriented **hazy** polyester film.

**APPLICATION** : Suitable for electrical motor winding insulation, capacitors, electric circuits & other electrical applications.

**SALIENT FEATURES :**

- High dielectric strength and exceptional temperature durability.
- Dimensionally stable at high operating temp.
- Excellent mechanical & thermal properties.
- High electrical resistance.

## TECHNICAL DATA SHEET ( SM 500 T )

Properties	Test Method	Unit	SM 500 T						
<b>PHYSICAL</b>									
Thickness	ASTM D-374	Micron	<b>23</b>	<b>36</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	
Thickness Variation	SMLTM	%	±5	±5	±5	±5	±5	±5	
Average Grammage	SMLTM	g/m <sup>2</sup>	32.2	50.4	70.0	105.0	140.0	175.0	
Density	ASTM D-1505	g/cc	1.4	1.4	1.4	1.4	1.4	1.4	
Width	-	mm	500-3100	500-3100	500-3100	500-3100	500-3100	500-3100	
Length	-	mtr	Up to 21000	Up to 18000	Up to 18000	Up to 6500	Up to 6500	Up to 6000	
Joints	-	%	80% (NIL) 20% (1 Joint)						
<b>OPTICAL</b>									
Haze	ASTM D-1003	%	4.0~5.0	5.0~6.0	6.0~7.0	7.0~8.0	7.0~8.0	7.0~8.0	
Transmittance	ASTM D-1003	%	87.0~88.0	87.0~88.0	87.0~88.0	87.0~88.0	87.0~88.0	87.0~88.0	
<b>MECHANICAL</b>									
Tensile Strength ( Min )	MD	ASTM D-882	Kg/cm <sup>2</sup>	2200	2100	2000	1800	1800	1700
	TD			2200	2100	1900	1800	1800	1700
Elongation ( Min )	MD	ASTM D-882	%	100	120	120	130	130	130
	TD			100	110	120	130	130	130
Coefficient of friction ( Max )	Static	ASTM D-1894	-	0.50	0.50	0.50	0.50	0.50	0.50
	Kinetic			0.45	0.45	0.45	0.45	0.45	0.45
<b>THERMAL</b>									
Shrinkage ( Max ) ( 150°C /30 Min )	MD	ASTM D-1204	%	2.4	2.4	2.4	2.4	2.4	2.4
	TD			0.4	0.4	0.4	0.4	0.4	0.4
<b>SURFACE</b>									
Wetting Tension	Plain	ASTM D-2578	Dyne/cm	44-46	44-46	44-46	44-46	44-46	44-46
	Corona			52-58	52-58	52-58	52-58	52-58	52-58
<b>ELECTRICAL</b>									
Break Down Voltage ( Min )	ASTM D-149	KV	6.0	7.0	9.0	12.0	14.0	16.0	
Surface resistivity	ASTM D-257	Ohm/sq	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	
Volume resistivity	ASTM D-257	Ohm-cm	10 <sup>16</sup>	10 <sup>16</sup>	10 <sup>16</sup>	10 <sup>16</sup>	10 <sup>16</sup>	10 <sup>16</sup>	

**SMLTM** : SML TEST METHOD, **MD** : MACHINE DIRECTION , **TD** : TRANSVERSE DIRECTION

**Notes:**

- 1- Tolerance in width +3mm and -0mm.
- 2- The above properties are indicative only. Film can be produced to suit customer's requirements.

