



SML Films Ltd.



## SM 301 M

Doc No.-F/PRD/02, Rev.-01, Dt.-01.06.2016

**DESCRIPTION** : SM 301 M, Grade film is a **ultraclear** co-extruded bi-axially oriented polyester film vacuum aluminium metallised on plain and other side plain.

**APPLICATION** : Suitable for sequences & glitter powder application.

**SALIENT FEATURES :**

- High Gloss Properties.
- Good Water Vapour and Gas Barrier properties.
- Excellent Machineability.
- Good Lamination Adhesion.

## TECHNICAL DATA SHEET ( SM 301 M )

Properties	Test Method	Unit	SM 301 M								
<b>PHYSICAL</b>											
Thickness	ASTM D-374	Micron	<b>23</b>	<b>30</b>	<b>36</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>118</b>	<b>136</b>	
Thickness Variation	SMLTM	%	±5	±5	±5	±5	±5	±5	±5	±5	
Average Grammage	SMLTM	g/m <sup>2</sup>	32.2	42.0	50.4	70.0	105.0	140.0	165.2	190.4	
Density	ASTM D-1505	g/cc	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
Metal Bond Strength (Min)	SMLTM	g/25 mm	100	100	100	100	100	100	100	100	
Width	–	mm	510-2450	510-2450	510-2450	510-2450	510-2450	510-2450	510-2450	510-2450	
Length	–	mtr	Up to 21000	Up to 21000	Up to 18000	Up to 18000	Up to 6500	Up to 6500	Up to 6000	Up to 6000	
<b>OPTICAL</b>											
Optical Density	SMLTM	–	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	
<b>MECHANICAL</b>											
Tensile Strength (Min)	MD	ASTM D-882	Kg/cm <sup>2</sup>	2200	2200	2100	2000	1900	1800	1800	1700
	TD			2100	2100	2000	2000	1900	1900	1900	1900
Elongation (Min)	MD	ASTM D-882	%	100	100	110	120	120	130	130	140
	TD			90	90	100	110	120	120	120	120
Coefficient of friction (Base Film), (Max)	Static	ASTM D-1894	–	0.50	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	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	2.4	
	TD			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
<b>SURFACE</b>											
Wetting Tension	Metal Side	ASTM D-2578	Dyne/cm	54	54	54	54	54	54	54	
	Plain Side			44-46	44-46	44-46	44-46	44-46	44-46	44-46	44-46
<b>BARRIER</b>											
WVTR (38°C & 90% RH) (Max)	ASTM F-1249	g/m <sup>2</sup> /day	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
OTR (23°C & 0% RH) (Max)	ASTM D-3985	cc/m <sup>2</sup> /day	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	

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

**Notes:**

- 1- Optical Density up to 2.8 is available on request.
- 2- Tolerance in width +3mm and -0mm.
- 3- The above properties are indicative only. Film can be produced to suit customer's requirements.

