



SML Films Ltd.



SM 303 M

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

DESCRIPTION : SM 303 M, Grade film is a **ultraclear** co-extruded bi-axially oriented polyester film vacuum aluminium metallised on corona side and other side plain.

APPLICATION : Suitable for sequences & glitter powder application.

SALIENT FEATURES :

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

TECHNICAL DATA SHEET (SM 303 M)

Properties	Test Method	Unit	SM 303 M								
PHYSICAL											
Thickness	ASTM D-374	Micron	23	30	36	50	75	100	118	136	
Thickness Variation	SMLTM	%	±5	±5	±5	±5	±5	±5	±5	±5	
Average Grammage	SMLTM	g/m ²	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	200	200	200	200	200	200	200	200	
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	
OPTICAL											
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%	
MECHANICAL											
Tensile Strength (Min)	MD	ASTM D-882	Kg/cm ²	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	0.50
	Kinetic			0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
THERMAL											
Shrinkage (Max) (150°C / 30 Min)	MD	ASTM D-1204	%	2.4	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
SURFACE											
Wetting Tension	Metal Side	ASTM D-2578	Dyne/cm	54	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
BARRIER											
WVTR (38°C & 90% RH) (Max)	ASTM F-1249	g/m ² /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 ² /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.

