SML Films Ltd.

Mellon®

SM 213 M

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

DESCRIPTION : SM 213 M, **Stamping Foil grade** film is a co-extruded bi-axially oriented polyester film vacuum aluminium metallised on corona side and other side plain.

APPLICATION : Suitable for Stamping foil, Metallic yarn & flexible packaging application.

SALIENT FEATURES :

- Excellent dimensional/thermal stability.
- Good Metal Bond Strength.
- Good Water Vapour and Gas Barrier properties.
- Excellent Machineability.
- Good Lamination Adhesion.

TECHNICAL DATA SHEET (SM 213 M)

Properties		Test Method	Unit	SM 213 M			
PHYSICAL							
Thickness		ASTM D-374	Micron	**12**	**15**	**23**	**36**
Thickness Variation		SMLTM	%	±5	±5	±5	±5
Average Grammage		SMLTM	g/m^2	16.8	21.0	32.2	50.4
Density		ASTM D-1505	g/cc	1.4	1.4	1.4	1.4
Metal Bond Strength (Min)		SMLTM	g/25 mm	200	200	200	200
Width		_	mm	510~2450	510~2450	510~2450	510~2450
Length		_	mtr	Up to 48000	Up to 36000	Up to 21000	Up to 21000
OPTICAL							
Optical Density		SMLTM	_	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%	2.2 ± 5%
MECHANICAL							
Tensile Strength (Min)	MD	ASTM D-882	Kg/cm^2	2400	2400	2300	2200
	TD			2300	2300	2200	2100
Elongation (Min)	MD	ASTM D-882	%	100	100	110	120
	TD			90	90	100	110
Coefficient of friction (Base Film), (Max)	Static	ASTM D-1894	_	0.50	0.50	0.50	0.50
	Kinetic			0.45	0.45	0.45	0.45
THERMAL							
Shrinkage (Max) (190°C / 05 Min)	MD	ASTM D-1204	%	3.2	3.2	3.2	3.2
	TD			-0.4	-0.4	-0.2	-0.2
SURFACE							
Wetting Tension	Metal Side	ASTM D-2578	Dyne/cm	54	54	54	54
	Plain Side			44-46	44-46	44-46	44-46
BARRIER							
WVTR (38°C & 90% RH) (Max)		ASTM F-1249	$g/m^2/day$	1.0	1.0	1.0	1.0
OTR (23°C & 0% RH) (Max)		ASTM D-3985	$cc/m^2/day$	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.

ISO 9001 UK ISO 14001 UK OHSAS 18001 UK ISO 22000 UK