



SML Films Ltd.



SM 403 M

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

DESCRIPTION : SM 403 M, **Twist Wrap Grade** film is a co-extruded bi-axially oriented polyester film vacuum aluminium metallised on corona side and other side plain.

APPLICATION : Suitable for twist wrap packaging for confectionery.

SALIENT FEATURES :

- Excellent mechanical & thermal properties.
- Good Water Vapour and Gas Barrier properties.
- Excellent Machineability.
- Good Lamination Adhesion.

TECHNICAL DATA SHEET (SM 403 M)

Properties	Test Method	Unit	SM 403 M				
PHYSICAL							
Thickness	ASTM D-374	Micron	12	15	18	23	
Thickness Variation	SMLTM	%	±5	±5	±5	±5	
Average Grammage	SMLTM	g/m ²	16.8	21.0	25.2	32.2	
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	2300	2200	2100	2100
	TD			2200	2200	2100	2100
Elongation (Min)	MD	ASTM D-882	%	100	100	100	100
	TD			100	100	100	100
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 (150°C / 30 Min)	MD	ASTM D-1204	%	25.0	25.0	25.0	25.0
	TD			25.0	25.0	25.0	25.0
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.

