

# TECHNICAL DATA SHEET

# FLEX MET PROTECT™

(METALLIZED BOPP FILM)

**NON HEAT SEALABLE (B-TDM-M)**  
**APPLICATION: DECORATIVE APPLICATIONS**

PROPERTIES	TEST METHOD (ASTM)	UNIT	TYPICAL VALUE					
			17	18	20	22	23	24
<b>OPTICAL</b>								
OPTICAL DENSITY (TOLERANCE : +/- 5%)	Gretag	-	1.8-2.0	1.8-2.0	1.8-2.0	1.8-2.0	1.8-2.0	1.8-2.0
<b>GENERAL</b>								
THICKNESS	Internal	Micron (Gauge)	17 68	18 72	20 80	22 88	23 92	24 96
FILM DENSITY	D-1505	gm/cc	0.91	0.91	0.91	0.91	0.91	0.91
GRAMMAGE	Internal	gm/m <sup>2</sup>	15.47	16.38	18.20	20.02	20.93	21.84
YIELD	Internal	m <sup>2</sup> /kg	64.64	61.05	54.95	49.95	47.77	45.79
TREATMENT LEVEL** (Min.)	D-2578	dyne/cm	36	36	36	36	36	36
<b>MECHANICAL</b>								
TENSILE STRENGTH AT BREAK (Min.)	MD*	Kg/cm <sup>2</sup>	1200	1200	1200	1200	1200	1200
	TD*		2500	2500	2500	2500	2500	2500
	MD*	(Psi)	17000	17000	17000	17000	17000	17000
	TD*		35500	35500	35500	35500	35500	35500
ELONGATION AT BREAK (Min.)	MD	%	160	160	160	160	160	160
	TD		60	60	60	60	60	60
	MD		Kg/cm <sup>2</sup>	18000	18000	18000	18000	18000
TD	30000	30000		30000	30000	30000	30000	
MODULUS OF ELASTICITY (Min.)	MD	(KPsi)	255.6	255.6	255.6	255.6	255.6	255.6
	TD		426	426	426	426	426	426
	MD		%	5.0	5.0	4.0	4.0	4.0
TD	2.0	2.0		2.0	2.0	2.0	2.0	
<b>THERMAL</b>								
LINEAR SHRINKAGE (Max.) (AT 120°C/5 Minute)	MD	D-1204	5.0	5.0	4.0	4.0	4.0	4.0
	TD		2.0	2.0	2.0	2.0	2.0	2.0
<b>BARRIER PROPERTIES</b>								
W.V.T.R.(38°C & 90%RH)	F-1249	gm/m <sup>2</sup> /day	<1.1	<1.0	<1.0	<1.0	<1.0	<1.0
		(gm/100in <sup>2</sup> /day)	<0.07	<0.06	<0.06	<0.06	<0.06	<0.06
O.T.R. (23°C & 0%RH)	D-3985	cc/m <sup>2</sup> /day	125	110	100	100	100	100
		(cc/100in <sup>2</sup> /day)	8.0	7.0	6.5	6.5	6.5	6.5

Ref no QAD UFLI S/07 - MB6/1

\*MD = MACHINE DIRECTION \*TD = TRANSVERSE DIRECTION

\*\*Treatment value of BOPP films tend to decay over a period of time during transportation & storage conditions. Therefore it is recommended that the customer should check the treatment levels prior to processing and if a reduction is observed then online corona treatment, high adhesive GSM & a suitable primer may be applied.

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