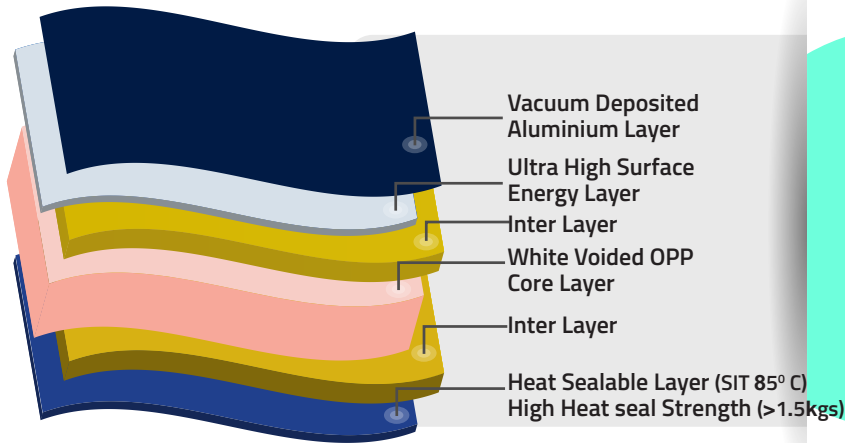


B-USP-M

Ultra High Barrier with Superior Heat Seal Strength white Voided Metallized BOPP film

B-USP-M is an outstanding barrier white voided metallized BOPP film, having ultra high surface energy on one side and the other side high seal strength, specially designed for OTM applications. The film has exceptional barrier to oxygen, moisture, aroma and mineral oil with robust seal performance (hermetic seal, high & broad hot tack, low SIT).



FILM STRUCTURE

THE BIG DIFFERENTIATORS



Robust Seal Performance

Low SIT, excellent broad & high hot tack, good hermetic seal & high seal strength.



Ultra High Barrier

Improves shelf life of chips/snacks by 50% retaining classical freshness, crispness & aroma.



Excellent Metal Bond & Flex Cracking Resistance

Durability & sustainability of barrier under extreme conditions. Much stronger extrusion/adhesive bond strengths.



OTM (Over The Mountain) Attribute

Sustainable good sealing performance at high altitude attributing no pack leakage.



Unique Value Proposition

To replace 3 layer structures to 2 layers in numerous seal packaging formats especially multipacks.

KEY FEATURES:

- Exceptional oxygen & moisture barrier
- Exceptional barrier to aroma & mineral Oil.
- Excellent metal adhesion for extrusion lamination
- High Seal strength & Robust seal performance
- Easy processing at high speed
- PVDC coated film replacement chlorine free

APPLICATIONS:

- Especially designed for OTM, LUP & MUP packs
- Dry fruits & beverage packaging
- Chips & snacks packaging
- Biscuits, cookies & crackers packaging
- Confectionery & chocolate packaging

PROPERTIES		TEST METHOD (ASTM)	UNIT	TYPICAL VALUES
THICKNESS		Internal	Micron	28
			(Gauge)	112
FILM DENSITY		D-1505	gm/cc	0.74
GRAMMAGE		Internal	gm/m ²	20.7
YEILD		Internal	m ² /kg	48.4
			in ² /lb	34028
TREATMENT LEVEL (met side)		D-2578	dyne/cm	38
OPTICAL DENSITY (TOLERANCE: +/- 5%)		Internal	-	2.8
TENSILE STRENGTH AT BREAK	MD*	D-882	kg/cm ²	700
	TD*			1300
	MD*		(KPsi)	9.9
	TD*			18.5
ELONGATION AT BREAK	MD*	D-882	%	180
	TD*			50
LINEAR SHRINKAGE (max) (5 Minutes at 130°C)	MD*	D-1204	%	6.0
	TD*			3.0
HEAT SEAL INITIATION TEMPERATURE		Internal	°C	85
HEAT SEAL STRENGTH	(Min)	Internal	gm/25mm	1500
WATER VAPOUR TRANSMISSION RATE (38°C & 90% RH)		F-1249	gm/m ² /day	0.1
			(gm/100 in ² /day)	0.006
OXYGEN TRANSMISSION RATE (23°C & 0% RH)		D-3985	cc/m ² /day	0.1
			(cc/100 in ² /day)	0.006

Ref no QAD UFLI S/20 – MB 13/1
*MD = MACHINE DIRECTION *TD = TRANSVERSE DIRECTION

STORAGE & HANDLING
FLEXMETPROTECT™ does not require special storage conditions. It is recommended to storage below 30 °C in order to avoid any deterioration of the film surface properties. It is advisable to use the material on FIFO basis. The film should be kept at operating environment for 24 hours before processing. FLEXMETPROTECT™ is best suitable for use within 3 months from date of dispatch.

FOOD CONTACT
FLEXMETPROTECT™ complies with EC and FDA regulations. Specific document and MSDS are available on request.

DISCLAIMER
It is the responsibility of our customers to determine that their use of our products is safe, lawful, and technically suitable in their intended applications. The technical data sheets are provided for discussion purposes only. The customer may not rely on the data provided for any manufacturing purpose. The values provided in the technical data sheet represent typical values based on the best of our knowledge as of the date when the data was compiled. The data is offered solely to provide possible suggestions for your own experimentation and not as a guarantee for the material supplied. The user is solely responsible for the end use of the product and needs to perform their own tests to confirm the product suitability/compatibility in all respects. Flex provides no warranty and accepts no liability for any loss or fitness of the product for any specific purpose based on the information contained in the technical data sheets. Flex reserves the right to change the technical data sheet at any time without prior notice.

**TDS issued on 28-06-2024. All previous versions of this grade are invalid.