

### Description

- Metallized bi-oriented polypropylene film, one side sealable with a broad sealing range. The seal initiation temperature (S.I.T) is  $\approx 105^{\circ}\text{C}$

### Properties

- Excellent metal adhesion
- Good barrier properties (moisture and oxygen)
- Sparkling appearance
- Good printing properties
- Excellent cold seal acceptance on non-metallized layer

### Typical Applications

- Low thicknesses of CZ/CY/CX are recommended for HFFS and VFFS machine as the inner sealable web in laminated structure (potato chips and snack) where barrier and light protection are required
- High thicknesses of metallized films are suitable for single web in hot and pressure sensitive adhesive applications

### Safeguards

- Release notes for Vibac Europe films are available on request

### Typical values

PROPERTIES		UNITS	TEST METHODS	15	20	25	30	35*
Thickness		microns	DIN EN ISO 2286 1/2/3	13.65	18.20	22.75	27.30	31.85
Grammage		$\text{g/m}^2$		73.26	54.95	43.96	36.63	31.40
Yield		$\text{m}^2/\text{Kg}$						
<b>TENSILE PROPERTIES</b>								
Tensile strength	MD	$\text{N/mm}^2$	ASTM D882 DIN EN ISO 527-1/3	160	160	155	155	150
Elongation	MD	%		200	210	220	230	230
Secant Modulus 100%	MD	$\text{N/mm}^2$		100	100	95	95	95
Elastic Modulus 1%	MD	$\text{N/mm}^2$		1900	2000	2000	1900	1900
Tensile strength	TD	$\text{N/mm}^2$		300	300	300	300	300
Elongation	TD	%		70	70	70	70	70
<b>THERMAL STABILITY</b>								
Shrinkage (hot air $130^{\circ}-5'$ )	MD	%	OPMA TC4(a)	4				
	TD	%		1				
<b>COEFFICIENT OF FRICTION</b>								
Untr / Untr	dynamic		ASTM D1894 DIN EN ISO 8295	0.35				
Untr / Met	dynamic			0.20				
<b>SEALING</b>								
Sealing threshold	Untr / Untr	$^{\circ}\text{C}$	OPMA TC4	$\approx 105$	$\approx 105$	$\approx 105$	$\approx 105$	$\approx 105$
Seal strength $130^{\circ}\text{C}$		$\text{g/cm}$		$> 150$	$> 200$	$> 200$	$> 200$	$> 200$
<b>METAL ADHESION</b>		$\text{g/cm}$	IOQ 824.29	$> 250$				
				<b>CZ</b> Standard deposition	<b>CY</b> High deposition	<b>CX</b> Heavy deposition		
<b>OPTICAL PROPERTIES</b>								
Optical density			IOQ 824.18	$\geq 1.8$	$\geq 2.0$	$\geq 2.2$		
<b>PERMEABILITY</b>								
OTR	$23^{\circ}\text{C}$ 0% r.h.	$\text{cc}/(\text{m}^2 \text{d atm})$	ASTM D3985	120	100	80		
WVTR	$37.8^{\circ}\text{C}$ 100% r.h.	$\text{g}/(\text{m}^2 \text{d})$	ASTM F1249	1.0	0.8	0.7		
WVTR	$23^{\circ}\text{C}$ 85% r.h.	"	DIN 53122	0.22	0.17	0.15		

(\*) Thickness available upon request

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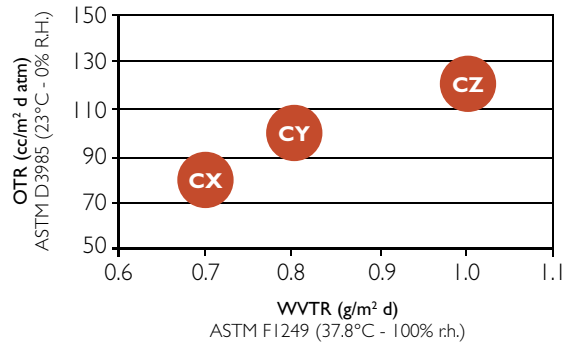
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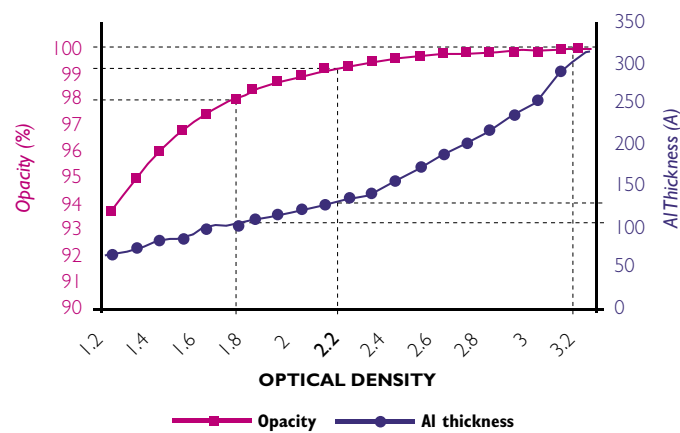
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PERMEABILITY RANGE



OPACITY - AL THICKNESS VERSUS OPTICAL DENSITY



#### Guidelines for storage of OPP film

No special conditions are required for the storage of OPP films but it is recommended that dry conditions below 30°C are employed to minimise any deterioration of surface discharge treatment level.  
 All OPP films should be allowed to reach operating room temperature for 24 hours before use.  
 Metallized (OPP) films are well known to age with time and it is recommended that stock should be evaluated for ink adhesion prior to printing and if necessary a primer employed. In case of deterioration of wetting tension level it is recommended that the material is re-treated prior to conversion to optimise adhesion of inks and adhesives.  
 Polypropylene films characteristics are maintained for 6 months from the date of production except for metallized layer surface tension.

#### Food contact

Vifan CZ/CY/CX complies with the requirements of EEC directives and FDA regulation. Specific documentation and migration test results are available upon request.