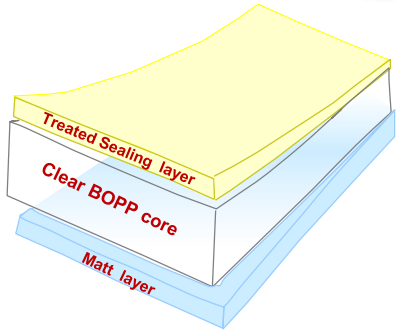
CSK

Matt Coextruded Film



Properties

- ✓ One side matt, other side glossy
- ✓ Sealable on matt and treated side
- ✓ Treated on the glossy side
- ✓ Excellent slip properties

Typical Applications

CSK is specifically designed to give a paper-like appearance
when used as outer ply of lamination for snack, confectionery and bakery markets

PROPERTIES		VALUE				UNIT	TEST METHOD
Thickness		**18**	**20**	**25**	**30**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**15,75**	**17,5**	**21,87**	**26,25**	g/m²	
Yield		**63,49**	**57,14**	**45,71**	**38,09**	m²/kg	
TENSILE PROPERTIES							
Tensile Strength	MD	**155**	**155**	**155**	**150**	N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**300**	**300**	**300**	**300**	N/mm²	
Elongation	MD	**220**	**220**	**230**	**230**	%	
	TD	**70**	**70**	**70**	**70**	%	
Secant Modulus 100%	MD	**95**	**95**	**95**	**95**	N/mm²	
Elastic Modulus 1%	MD	**2000**	**2000**	**1900**	**1900**	N/mm²	
OPTICAL PROPERTIES							
Gloss 45°		**9**				Gloss unit	ASTM D2457
Haze		**80**				%	ASTM D1003
THERMAL STABILITY							
Shrinkage (hot air 130°C - 5')	MD	**5**				%	OPMA TC4a
	TD	**2**				%	
SEALING PROPERTIES							
Sealing threshold	Untr/Untr	**≈ 105**				°C	OPMA TC4b
Seal strength 130 °C	Untr/Untr	**>= 190**				g/cm	
COEFFICIENT OF FRICTION							
Matt/ Matt	dynamic	**0,25**					ASTM D1894 DIN EN ISO 8295-04
PERMEABILITY							
Oxygen Transmission Rate	23°C-0% R.H	**2000**	**1900**	**1600**	**1300**	cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-100% R.H	**7,5**	**6,5**	**6**	**5**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**1,6**	**1,4**	**1,3**	**1**	g/(m² d)	DIN 53122
TREATMENT							
Treatment level		**38**				dyne/cm	**IOQ 730.1.27 (Softal pencil**
DON'T USE CORONA TREATMENT BEFORE PRINTING OR LAMINATION!							

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties and surface treatment level. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Films are suitable for use within 6 months from date of delivery

Food contact

Vibac **CSK** complies to the requirements of EEC directives and FDA regulations Specific documentation and migration test results are available upon request. The results obtained and above properties refer to average values of laboratory tests on samples of our standard production. It is understood that this entails no obligation and/or other responsibility on our part. Customer should verify the suitability of the film for its specific end use, therefore this document will not represent a product specification . Vibac does not guarantee the typical (or other) values. Analysis may be performed on representative samples and not the actual product shipped.

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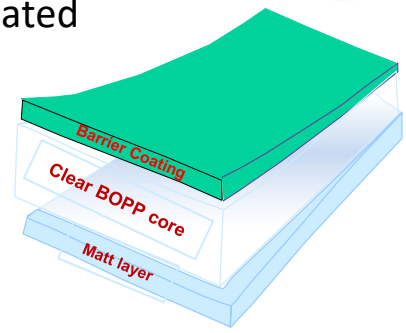
Ed.3; rev.: 7; 28.06.2023; eighth emission

H1.S PRO-TEX MOSH/MOAH PROTECTOR Chlorine free VIBAC

VCOAT : Matt BOPP film one side Barrier coated



Properties

- ✓ Excellent Oxygen & Aroma barriers
- ✓ Excellent seal strength on sealing layer (matt / matt)
- ✓ Outstanding optical properties
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 3 years*

Typical Applications

Barrier coated side needs to be protect from humidity. The film is suitable for duplex structure

PROPERTIES		VALUE	UNIT	TEST METHOD
Thickness		**20**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**17,5**	g/m²	
Yield		**57,14**	m²/kg	
TENSILE PROPERTIES				
Tensile Strength	MD	**155**	N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**300**	N/mm²	
Elongation	MD	**250**	%	
	TD	**90**	%	
Secant Modulus 100%	MD	**85**	N/mm²	
Elastic Modulus 1%	MD	**2000**	N/mm²	
OPTICAL PROPERTIES				
Gloss 45°		**9**	Gloss Unit	ASTM D2457
Haze		**70**	%	ASTM D1003
THERMAL STABILITY				
Shrinkage (hot air 130°C - 5')	MD	**5**	%	OPMA TC4a
	TD	**2**	%	
SEALING PROPERTIES				
Sealing threshold	Untr / Untr	**≈ 105**	°C	OPMA TC4b
Seal strength 130 °C	Untr / Untr	**≥ 190**	g/cm	
COEFFICIENT OF FRICTION				
Untr/Untr *(matt/matt)*	dynamic	**0,50**		ASTM D1894 DIN EN ISO 8295-04
Untr/Met *(matt/met)*	dynamic	**0,25**		
PERMEABILITY				
Oxygen Transmission Rate	23°C-0% R.H.	**1**	cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-100% R.H.	**5,0**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**1,1**	g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Coated OPP films are suitable for use within 12 months from date of delivery

Food contact

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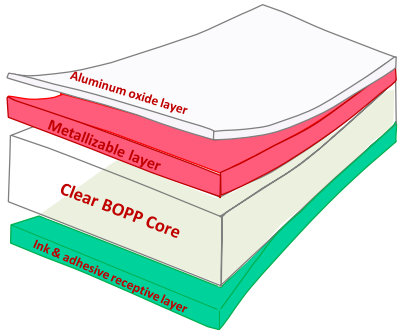
Ed.3; rev.: 2; 28.06.2023; third emission

LE.OX Provisional

VCOAT : Trasparent high barrier film



Properties

- ✓ Outstanding moisture barrier properties
- ✓ Excellent Oxygen & Aroma barriers
- ✓ Good barrier mineral oil
- ✓ Excellent optical properties
- ✓ Good printing properties
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 2 years *

Typical Applications

To replace alu foil in flexible packaging. Especially designed for duplex structure as sealable side and for cold seal applications. Suitable to be treated during conversion; can be applied, as intermediate layer in triplex structure.

PROPERTIES		VALUE			UNIT	TEST METHOD
Thickness		**15**	**18**	**30**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**13,65**	**16,38**	**27,30**	g/m²	
Yield		**73,26**	**61,05**	**36,63**	m²/kg	
TENSILE PROPERTIES						
Tensile Strength	MD	**170**			N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**280**			N/mm²	
Elongation	MD	**220**			%	
	TD	**80**			%	
Secant Modulus 100%	MD	**110**			N/mm²	
Elastic Modulus 1%	MD	**1900**			N/mm²	
OPTICAL PROPERTIES						
Gloss 45°		**90**			Gloss Unit	ASTM D2457
Haze		**1,5**			%	IOQ 824.18
THERMAL STABILITY						
Shrinkage (hot air 130°C - 5')	MD	**4**			%	OPMA TC4a
	TD	**2**			%	
PERMEABILITY						
Oxygen Transmission Rate	23°C-0% R.H.	**0,20**			cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-90% R.H.	**0,70**			g/(m² d)	ASTM F1249
	23°C-85% R.H.	**0,18**			g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

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Food contact

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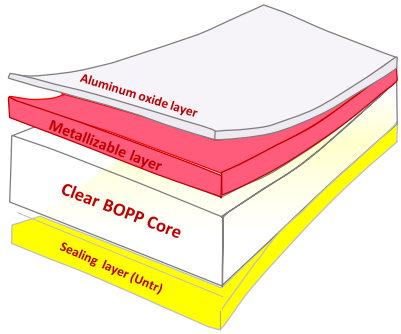
Ed.1; rev: 2; 18.03.2024; Third emission

LE1.OX Provisional

VCOAT Trasparent high barrier film



Properties

- ✓ Outstanding moisture barrier properties
- ✓ Excellent Oxygen & Aroma barriers
- ✓ Good barrier mineral oil
- ✓ Excellent optical properties
- ✓ Good printing properties
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 2 years *

Typical Applications

To replace alu foil in flexible packaging. Especially designed for duplex structure as sealable side and for cold seal applications. Suitable to be treated during conversion; can be applied, as intermediate layer in triplex structure.

PROPERTIES		VALUE			UNIT	TEST METHOD
Thickness		15	18	30	micron	DIN EN ISO 2286- 1/2/3
Grammage		13,65	16,38	27,30	g/m²	
Yield		73,26	61,05	36,63	m²/kg	
TENSILE PROPERTIES						
Tensile Strength	MD	170			N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	280			N/mm²	
Elongation	MD	220			%	
	TD	80			%	
Secant Modulus 100%	MD	110			N/mm²	
Elastic Modulus 1%	MD	1900			N/mm²	
OPTICAL PROPERTIES						
Gloss 45°		90			Gloss Unit	ASTM D2457
Haze		1,5			%	IOQ 824.18
THERMAL STABILITY						
Shrinkage (hot air 130°C - 5')	MD	4			%	OPMA TC4a
	TD	2			%	
SEALING PROPERTIES						
Sealing Threshold	Untr/Untr	≈ 105			°C	OPMA TC4b
Seal Strength 130°C	Untr/Untr	≥ 200			g/cm	
PERMEABILITY						
Oxygen Transmission Rate	23°C-0% R.H.	0,20			cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-90% R.H.	0,70			g/(m² d)	ASTM F1249
	23°C-85% R.H.	0,18			g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Coated OPP films are suitable for use within 12 months from date of delivery

Food contact

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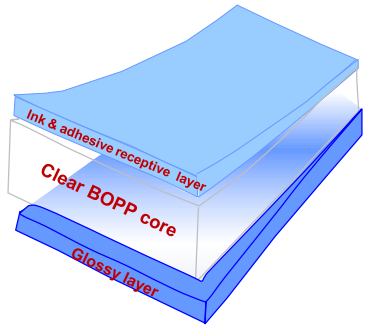
Ed.1; rev: 1; 18.03.2024; Second emission

Not Sealable Transparent Film

Properties

- ✓ Improved thermal resistance
- ✓ Excellent dimensional staility
- ✓ Superior stiffness
- ✓ Excellent optical properties
- ✓ Outstanding printing characteristics



Typical Applications

REB is specially designed to be used as outside web of laminates as alternative to BOPET

PROPERTIES		VALUE			UNIT	TEST METHOD
Thickness		**18**	**20**	**30**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**16,38**	**18,20**	**27,30**	g/m²	
Yield		**61,05**	**54,95**	**36,63**	m²/kg	
TENSILE PROPERTIES						
Tensile Strength	MD	**170**			N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**300**			N/mm²	
Elongation	MD	**170**			%	
	TD	**60**			%	
Secant Modulus 100%	MD	**115**			N/mm²	
Elastic Modulus 1%	MD	**2500**			N/mm²	
OPTICAL PROPERTIES						
Gloss 45°		**90**			Gloss unit	ASTM D2457
Haze		**1,75**	**1,75**	**1,90**	%	ASTM D1003
THERMAL STABILITY						
Shrinkage (hot air 130°C - 5')	MD	**2,5**			%	OPMA TC4a
	TD	**0,5**			%	
COEFFICIENT OF FRICTION						
Untr / Untr	dynamic	**0,21**				ASTM D1894 DIN EN ISO 8295-04
Untr / Met	dynamic	**0,20**				
PERMEABILITY						
Oxygen Transmission Rate	23°C-0% R.H.	**2050**	**1860**	**1250**	cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-100% R.H.	**7,0**	**6,5**	**5,0**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**1,6**	**1,4**	**1,1**	"	DIN 53122
TREATMENT						
Treatment level		**38**			dyne/cm	**IOQ 730.1.27 Softal pencil**
DO NOT USE CORONA TREATMENT BEFORE PRINTING OR LAMINATION						

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties and surface treatment level. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Films are suitable for use within 6 months from date of delivery

Food contact

Vibac **REB** complies to the requirements of EEC directives and FDA regulations Specific documentation and migration test results are available upon request. The results obtained and above properties refer to average values of laboratory tests on samples of our standard production. It is understood that this entails no obligation and/or other responsibility on our part. Customer should verify the suitability of the film for its specific end use, therefore this document will not represent a product specification . Vibac does not guarantee the typical (or other) values. Analysis may be performed on representative samples and not the actual product shipped.

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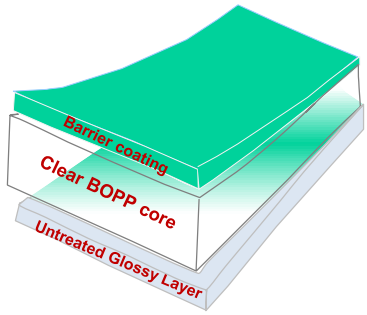
Ed.3; rev.: 3; 03.07.2023; fourth emission

REHB.C

VCOAT : Clear BOPP film with barrier coating



Properties

- ✓ Good aroma barrier
- ✓ Outstanding oxygen and mineral oil barrier properties
- ✓ Printable on barrier coating
- ✓ Outstanding optical properties
- ✓ To be used in laminated structure to replace clear barrier film
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 2 years *

Typical Applications

Barrier coating needs to be protected from humidity. The film is suitable for outside layer in duplex structure.

PROPERTIES		VALUE	UNIT	TEST METHOD
Thickness		**20**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**18,20**	g/m²	
Yield		**54,95**	m²/kg	
TENSILE PROPERTIES				
Tensile Strength	**MD**	**160**	N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**290**	N/mm²	
Elongation	**MD**	**210**	%	
	TD	**70**	%	
Secant Modulus 100%	**MD**	**110**	N/mm²	
Elastic Modulus 1%	**MD**	**1900**	N/mm²	
OPTICAL PROPERTIES				
Gloss 45°		**85**	Gloss Unit	ASTM D2457
Haze		**1,4**	%	ASTM D1003
THERMAL STABILITY				
Shrinkage (hot air 130°C - 5')	**MD**	**2,5**	%	OPMA TC4a
	TD	**0,5**	%	
COEFFICIENT OF FRICTION				
Untr / Untr	**dynamic**	**0,30**		ASTM D1894
Untr/ Met	**dynamic**	**0,20**		DIN EN ISO 8295-04
PERMEABILITY				
Oxygen Transmission Rate	**23°C-0% R.H.**	**1**	cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	**37.8°C-90% R.H.**	**5,0**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**1,1**	g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Coated OPP films are suitable for use within 12 months from date of delivery.

Food contact

Vibac **REHB.C** complies to the requirements of EEC directives and FDA regulations Specific documentation and migration test results are available upon request.

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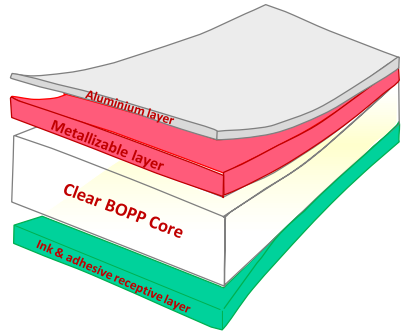
Ed.3; rev.: 1; 16.05.2023; second emission

REB.CM

VCOAT : Ultra high barrier metallized coated film



Properties

- ✓ Excellent metal adhesion
- ✓ Outstanding barrier properties (aroma, moisture and oxygen)
- ✓ Good barrier mineral oil
- ✓ Sparkling appearance
- ✓ Good printing properties
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 2 years *

Typical Applications

Flexible packaging. It's suitable as intermediate layer of triplex structure to replace the Alu foil.

PROPERTIES		VALUE			UNIT	TEST METHOD
Thickness		**15**	**18**	**30**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**13,65**	**16,38**	**27,30**	g/m²	
Yield		**73,26**	**61,05**	**36,63**	m²/kg	
TENSILE PROPERTIES						
Tensile Strength	MD	**170**			N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**280**			N/mm²	
Elongation	MD	**220**			%	
	TD	**80**			%	
Secant Modulus 100%	MD	**110**			N/mm²	
Elastic Modulus 1%	MD	**1900**			N/mm²	
OPTICAL PROPERTIES						
Optical density		**2,7**			%	IOQ 824.18
THERMAL STABILITY						
Shrinkage (hot air 130°C - 5')	MD	**4**			%	OPMA TC4a
	TD	**2**			%	
PERMEABILITY						
Oxygen Transmission Rate	23°C-0% R.H.	**0,1**			cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-90% R.H.	**0,15**	**0,10**	**0,08**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**0,035**	**0,03**	**0,02**	g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Coated OPP films are suitable for use within 12 months from date of delivery

Food contact

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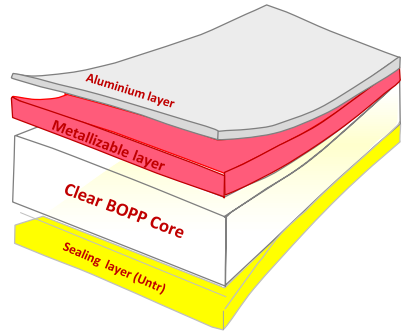
Ed.1; rev.: 6, 24.11.2023; seventh emission

REB1.CM

VCOAT Ultra high barrier metallized film



Properties

- ✓ Excellent metal adhesion
- ✓ Outstanding barrier properties (aroma, moisture and oxygen)
- ✓ Good barrier mineral oil
- ✓ Sparkling appearance
- ✓ Good printing properties
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 2 years *

Typical Applications

To replace alu foil in flexible packaging. Especially designed for duplex structure as sealable side and for cold seal applications. Suitable to be treated during conversion; can be applied, as intermediate layer in triplex structure.

PROPERTIES		VALUE			UNIT	TEST METHOD
Thickness		15	18	30	micron	DIN EN ISO 2286- 1/2/3
Grammage		13,65	16,38	27,30	g/m²	
Yield		73,26	61,05	36,63	m²/kg	
TENSILE PROPERTIES						
Tensile Strength	MD	170			N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	280			N/mm²	
Elongation	MD	220			%	
	TD	80			%	
Secant Modulus 100%	MD	110			N/mm²	
Elastic Modulus 1%	MD	1900			N/mm²	
OPTICAL PROPERTIES						
Optical density		2,5			%	IOQ 824.18
THERMAL STABILITY						
Shrinkage (hot air 130°C - 5')	MD	4			%	OPMA TC4a
	TD	2			%	
SEALING PROPERTIES						
Sealing Threshold	Untr/Untr	≈ 105			°C	OPMA TC4b
Seal Strength 130°C	Untr/Untr	≥ 200			g/cm	
PERMEABILITY						
Oxygen Transmission Rate	23°C-0% R.H.	0,10			cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-90% R.H.	0,15			g/(m² d)	ASTM F1249
	23°C-85% R.H.	0,04			g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

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Food contact

Vibac **REB1.CM** complies to the requirements of EEC directives and FDA regulations Specific documentation and migration test results are available upon request

The results obtained and above properties refer to average values of laboratory tests on samples of our standard production. It is understood that this entails no obligation and/or other responsibility on our part. Customer should verify the suitability of the film for its specific end use, therefore this document will not represent a product specification .Vibac does not guarantee the typical (or other) values. Analysis may be performed on representative samples and not the actual product shipped.

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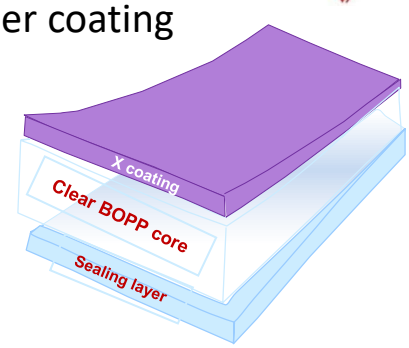
X1HB.C PRO-TEX MOSH/MOAH PROTECTOR Chlorine free VIBAC

VCOAT : Clear BOPP film one side high barrier coating



Properties

- ✓ PVdC Free
- ✓ Excellent WV, Oxygen & Aroma barriers
- ✓ Excellent seal strength on sealing layer (untr / untr)
- ✓ Outstanding optical properties
- ✓ X coating printable properties in line with acrylic coating
- ✓ Provide significant protection against mineral oil barrier migration, protection period more than 3 years*

Typical Applications

This film is designed for use in HFFS & VFFS flexible packaging machines. To be used in duplex structure with std coex for lap seal and cast PP.

PROPERTIES		VALUE		UNIT	TEST METHOD
Thickness		**20**	**30**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**18,4**	**27,6**	g/m²	
Yield		**54,3**	**36,2**	m²/kg	
TENSILE PROPERTIES					
Tensile Strength	MD	**160**		N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**280**		N/mm²	
Elongation	MD	**250**		%	
	TD	**90**		%	
Secant Modulus 100%	MD	**85**		N/mm²	
Elastic Modulus 1%	MD	**2700**		N/mm²	
OPTICAL PROPERTIES					
Gloss 45°		**98**		Gloss Unit	ASTM D2457
Haze		**2,0**		%	ASTM D1003
THERMAL STABILITY					
Shrinkage (hot air 130°C - 5')	MD	**4**		%	OPMA TC4a
	TD	**2**		%	
SEALING PROPERTIES					
Sealing threshold	Untr / Untr	≈ **105**		°C	OPMA TC4b
Seal strength 130 °C	Untr / Untr	≥ **200**		g/cm	
COEFFICIENT OF FRICTION					
Untr/Untr	dynamic	**0,50**			ASTM D1894 DIN EN ISO 8295-04
Untr/Met	dynamic	**0,25**			
X/X	dynamic	**0,30**			
X/met	dynamic	**0,25**			
PERMEABILITY					
Oxygen Transmission Rate	23°C-0% R.H.	**1**		cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-100% R.H.	**5**	**4**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**1,1**	**0,9**	g/(m² d)	DIN 53122

* under certain conditions

Guidelines for storage of OPP film

No special conditions are required fort the storage of OPP films, however it is recommended that dry conditions below 30°C are employed to minimize any deterioration of film properties. All OPP films should be allowed to reach operation room temperature for 24 hours before use. Coated OPP films are suitable for use within 12 months from date of delivery

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