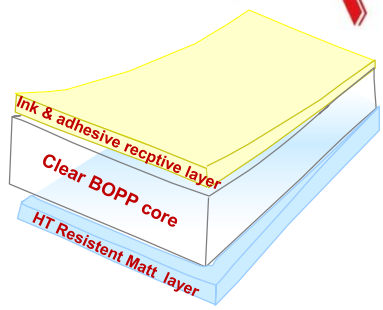
CSKHT

Improved Thermal Resistance Matt Film

Properties

- ✓ Improved thermal resistance
- ✓ Excellent dimensional stability
- ✓ Superior stiffness
- ✓ One side matt , other side glossy
- ✓ Treated on the glossy side
- ✓ Excellent slip properties



Typical Applications

Matt layer in Duplex and Triplex monoPP structures for High Thermal demanding applications

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	**160**	N/mm²	ASTM D882 DIN EN ISO 527-1/3
	TD	**300**	N/mm²	
Elongation	MD	**220**	%	
	TD	**70**	%	
Secant Modulus 100%	MD	**95**	N/mm²	
Elastic Modulus 1%	MD	**2000**	N/mm²	
OPTICAL PROPERTIES				
Gloss 45°		**9**	Gloss unit	ASTM D2457
Haze		**75**	%	ASTM D1003
THERMAL STABILITY				
Shrinkage (hot air 130°C - 5')	MD	**3**	%	OPMA TC4a
	TD	**1**	%	
COEFFICIENT OF FRICTION				
Matt/ Matt	dynamic	**0,30**		ASTM D1894 DIN EN ISO 8295-04
TREATMENT				
Treatment level		**38**	dyne/cm	ASTM D2578
DO NOT REFRESH THE TREATMENT				

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

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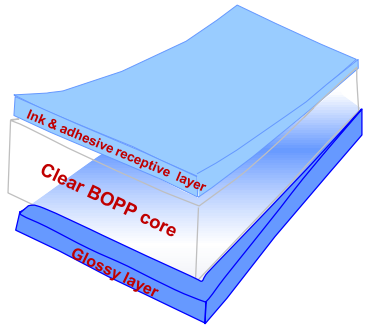
Ed.3; rev.:1; 28.06.2023; second emission

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

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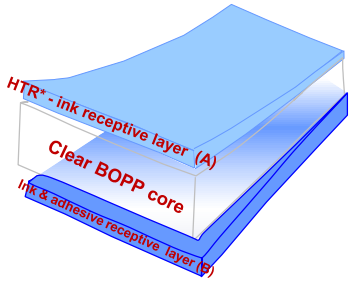
Ed.3; rev.: 3; 03.07.2023; fourth emission

Not Sealable Transparent Treated on both sides

Properties

- ✓ Improved thermal resistance
- ✓ Excellent dimensional stability
- ✓ Superior stiffness
- ✓ Excellent optical properties
- ✓ Outstanding printing characteristics
- ✓ Treated on both sides



*HTR: high thermal resistant

Typical Applications

REBT both side treated film is specially designed to be used as outside web of laminates as alternative to BOPET

PROPERTIES		VALUE		UNIT	TEST METHOD
Thickness		**20**	**30**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**18,20**	**27,3**	g/m²	
Yield		**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	**180**		%	
	TD	**60**		%	
Secant Modulus 100%	MD	**115**		N/mm²	
Elastic Modulus 1%	MD	**2500**		N/mm²	
OPTICAL PROPERTIES					
Gloss 45°		**80**		Gloss unit	ASTM D2457
Haze		**3,5**		%	ASTM D1003
THERMAL STABILITY					
Shrinkage (hot air 130°C - 5')	MD	**2,5**		%	OPMA TC4a
	TD	**0,5**		%	
COEFFICIENT OF FRICTION					
Tr A / Tr A	dynamic	**0,4**			ASTM D1894 DIN EN ISO 8295-04
Tr B / Tr B	dynamic	**0,4**			
PERMEABILITY					
Oxygen Transmission Rate	23°C-0% R.H.	**1860**	**1300**	cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-100% R.H.	**6,5**	**5**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**1,4**	**1,1**	"	DIN 53122
TREATMENT					
Treatment level layer A		**38**		dyne/cm	ASTM D2578
Treatment level layer B		**38**			

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

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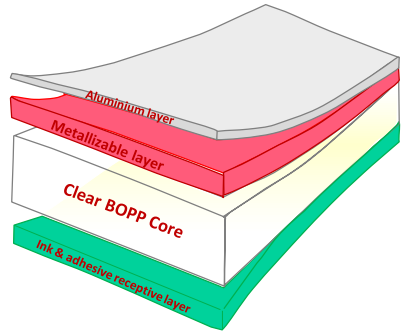
Ed.3; rev.: 5; 17.05.2024; sixth emission

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

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

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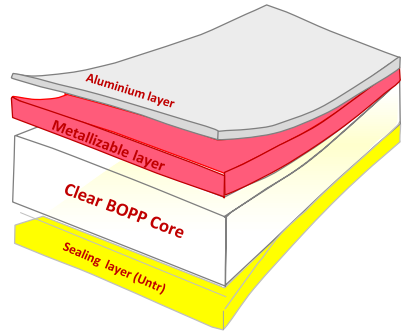
Ed.1; rev.: 6, 24.11.2023; seventh emission

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

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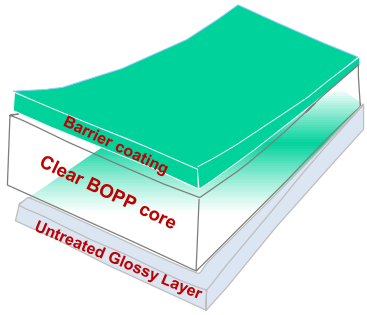
Ed.1; rev.: 6 06.10.2023; Seventh emission

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

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Food contact

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

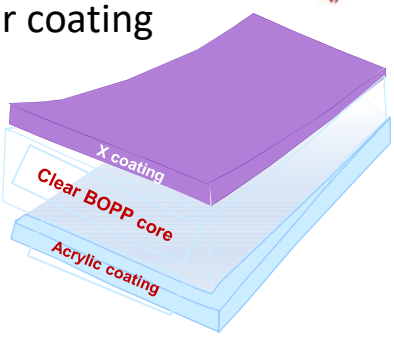
XA.C

PRO-TEX MOSH/MOAH PROTECTOR

Chlorine free

VIBAC

VCOAT : Clear BOPP film, Acrylic/High barrier coating



Properties

- ✓ PVdC Free
- ✓ Excellent WV, Oxygen & Aroma barriers
- ✓ Excellent seal strength on Acr/Acr and Acr/X combination
- ✓ 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, as well as in Overwrapping applications

PROPERTIES		VALUE					UNIT	TEST METHOD
Thickness		**21**	**26**	**32**	**42**	**47**	micron	DIN EN ISO 2286- 1/2/3
Grammage		**19,32**	**23,92**	**29,44**	**38,64**	**43,24**	g/m²	
Yield		**51,76**	**41,81**	**33,97**	**25,88**	**23,13**	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**		**2,2**	**2,4**	**2,6**	%	ASTM D1003
THERMAL STABILITY								
Shrinkage (hot air 130°C - 5')	MD	**4**					%	OPMA TC4a
	TD	**2**					%	
SEALING PROPERTIES								
Sealing threshold	Acr/Acr	**≈ 90**					°C	OPMA TC4b
Seal strength 130 °C	Acr/Acr	**≥ 200**					g/cm	
	X / Acr	**≥ 200**					g/cm	
COEFFICIENT OF FRICTION								
Acr/Acr	dynamic	**0,25**						ASTM D1894 DIN EN ISO 8295-04
Acr/Met	dynamic	**0,20**						
X/X	dynamic	**0,30**						
X/met	dynamic	**0,25**						
PERMEABILITY								
Oxygen Transmission Rate	23°C-0% R.H.	**10**					cc/(m² d atm)	ASTM D3985
Water Vapor Transmission Rate	37.8°C-90% R.H.	**4**	**3,5**	**3**	**2,5**	**2,2**	g/(m² d)	ASTM F1249
	23°C-85% R.H.	**0,85**	**0,75**	**0,65**	**0,55**	**0,50**	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.: 4; 18.10.2022; fifth emission