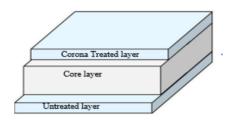
a Biaxially oriented transparent Polyester film with one side corona treatment. The treated surface has higher surface anergy which provides excellent adhesion to printing inks and laminating adhesives. The film with excellent optical and mechanical properties.

PRODUCT FEATURES:

Superior transparency and high gloss good machinability Good dimensional stability

APPLICATIONS:

Printing, Metallizing & lamination process in flexible packaging applications.



	PROPERTIES		UNIT				TYPICAL	. VALUES				TEST METHOD.
	Thickness		Microns	8	10	11	12	15	19	23	30	ASTM D 374
	Inickness		Gauge	32	40	44	48	60	76	92	120	A31101 D 374
PHYSICAL	Grammage		g/m²	11.2	14	15.4	16.8	21	26.6	32.2	42	* 4 DIN4
PHYSICAL	Yield		m²/kg	89.3	71.4	64.9	59.5	47.6	37.5	31.1	23.81	* ABIM
	Coefficient of Friction (Coefficient of Friction (Film/Film)					0.	50				ASTM D 1894
	Surface Tension (Plain	Side)	dun a a la m				4	4	k-			ASTM D 2578
	Surface Tension (coro	na side)	dynes/cm				5	52				A31WI D 2378
OPTICAL	Haze		%				≤4	1.0				ASTM D 1003
Transmittance			70				g	0		4		ASTM D 2457
	Tensile Strength at *TI	*MD	landom?				20	000	-4			
		*TD	k <mark>g/cm²</mark>				21	.00				ASTM D 882
MECHANICAL		MD	- kpsi				2	.9				ASTIVI D 662
IVIECHANICAL	т		кры				3	80				
	Elongation at Break	MD	%	115							ASTM D 882	
	Elongation at break	TD	/0	100								
THERMAL	Thermal Shrinkage	MD	%		2.4							ABIM
THERWAL	Thermal Similkage	TD	/0				0	.4				(150°C ,30 min)
	Water Vapor Permeabi	ility	g/m²/24h	<60	<50	<40	<40	<<40	<35	<<30	25	ASTM F 1249
BARRIER	(W.V.T.R.)		g/100in²/24h	<3.8	<3.2	<2.5	<2.5	<2.5	<2.2	<1.9	<1.6	(38°C / 90% RH)
	Oxygen Transmission F	Rate	cc/m ² /24h	<140	<135	<130	<130	<130	<110	<90	<70	ASTM D 3985
(O.T.R.)			cc/in²/24h	<8.8 <8.4 <8.1 <8.1 <<8.1 <6.9 <5.6 <4.4						(23°C / 0% RH)		
	* ABIM – A	Akij BOPET Int	ernal Method		*M	D – Machine D	irection		*TD – Tra	nsverse Direc	tion	

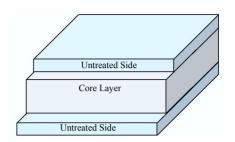
transparent film with both side plain surfaces. The film with excellent optical and mechanical properties, suit printing and lamination application.

PRODUCT FEATURES:

Superior transparency and high gloss Good machinability Good dimensional stability

APPLICATIONS:

Printing, Metallizing & lamination process in flexible packaging applications.



	PROPERTIES		UNIT				TYPICAL	VALUES				TEST METHOD.			
	Thickness		Microns	8	10	11	12	15	19	23	30	ASTM D 374			
	THICKIESS		Gauge	32	40	44	48	60	76	92	120	ASTIVI D 374			
DUNCICAL	Grammage		g/m²	11.2	14	15.4	16.8	21	26.6	32.2	42	* ADIA4			
PHYSICAL	Yield		m²/kg	89.3	71.4	64.9	59.5	47.6	37.5	31.1	23.81	* ABIM			
	Coefficient of Friction (File	n/Film)				l.	0.	45				ASTM D 1894			
	Surface Tension (Plain si	ide)	dynes/cm				4	14				ASTM D 2578			
0071041	Haze	K .	%				<u>≤</u> 4	1.5	6			ASTM D 1003			
OPTICAL	Transmittance	39.7					g	0				ASTM D 2457			
	*MD						20	000				Frederick			
	Desails Strength at	*TD	kg/cm ²				21	.00		41		ASTM D 882			
		MD	knoi				2	.9	15			ASTM D 882			
MECHANICAL	TD		kpsi				3	0							
	MD	MD	0/				1	15				ASTM D 882			
	Elongation at Break TD		%	100											
T.1.501.441	TI 101:1	MD	0/				2	.4				ABIM			
THERMAL	Thermal Shrinkage -	TD	%	0.4								(150°C ,30 min)			
	Water Vapor Permeability	/	g/m²/24h	60	50	40	40	40	35	30	25	ASTM F 1249			
BARRIER	(W.V.T.R.)		g/100in²/24h	3.8	3.2	2.5	2.5	2.5	2.2	1.9	1.6	(38°C / 90% RH)			
	Oxygen Transmission Ra	ite	cc/m ² /24h	140	135	130	130	130	110	90	70	ASTM D 3985			
	(O.T.R.)			8.8	8.4	8.1	8.1	8.1	6.9	5.6	4.4	(23°C / 0% RH)			
	* ABIM – Akij	j BOPET Int	ernal Method		*MI	D – Machine D	irection		*TD – Tra	nsverse Direc	tion				

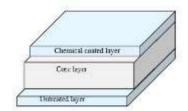
a Biaxially oriented transparent Polyester film with one side acrylic coating. The coated surface gives excellent adhesion to a wide range of inks & laminating adhesives thus improving the bond strength of the flexible laminate. . The other side of the film surface can be also corona treated. The film process has good thermal, mechanical, optical, and surface properties along with excellent transparency and dimensional stability.

APPLICATIONS:

Superior transparency and high gloss good machinability Good dimensional stability

PRODUCT FEATURES:

Flexible packaging
Printing, Coating & lamination
Frozen food packaging
Hot filled application like Tomato Ketchup,
juices, etc.



	PROPERTIES		UNIT				TYPICAL	VALUES				TEST METHOD.
	Thirtie		Microns	8	10	11	12	15	19	23	30	ACTNA D 274
	Thickness		Gauge	32	40	44	48	60	76	92	120	ASTM D 374
SUNGION!	Grammage		g/m²	11.2	14	15.4	16.8	21	26.6	32.2	42	* * * * * * * * * * * * * * * * * * * *
PHYSICAL	Yield		m²/kg	89.3	71.4	64.9	59.5	47.6	37.5	31.1	23.81	* ABIM
	Coefficient of Friction (Film/Film)				•	0.	50				ASTM D 1894
	Surface Tension (Acry	lic Side)					4	10				ACTA A D 0570
11	Surface Tension(Coro	na side)	dynes/cm				5	52	6			ASTM D 2578
0071041	Haze						≤4	1.0				ASTM D 1003
OPTICAL Transmittance		76	%		90							
	*MD		1/2				20	000		41		
	Tensile Strength at Break MD	*TD	kg/cm ²				21	100	1			ASTM D 882
		MD	T. Land			_	2	29				ASTM D 882
MECHANICAL		TD	kpsi	30								
	E	MD	0/	115								ASTM D 882
	Elongation at Break	TD	%	100								
THERMAN	TI 101:1	MD	0/				2	.4				ABIM
THERMAL	Thermal Shrinkage	TD	%	0.4								(150°C ,30 min)
	Water Vapor Permeabi	ility	g/m²/24h	<60	<50	<40	<40	<40	<35	<30	<25	ASTM F 1249
BARRIER	(W.V.T.R.)	,	g/100in²/24h	<3.8	<3.2	<2.5	<2.5	<2.5	<2.2	<1.9	<1.6	(38°C / 90% RH)
	Oxygen Transmission F	Rate	cc/m ² /24h	<140	<135	<130	<130	<130	<110	<90	<70	ASTM D 3985
(O.T.R.)		cc/in²/24h	<8.8	<8.4	<8.1	<8.1	<8.1	<6.9	<5.6	<4.4	(23°C / 0% RH)	
	* ABIM – A	Akij BOPET Int	ernal Method		*M	D – Machine D	Direction		*TD – Tra	nsverse Direc	tion	

a Biaxially oriented transparent Polyester film with one side Co-polyester pre-coated and other side plain. The coated surface gives excellent adhesion to a wide range of inks & laminating adhesives thus improving the bond strength of flexible laminate. It also acts as an excellent base film for metallization. The other side of film surface can be also corona treated. The film process good thermal, mechanical, optical and surface properties along with excellent transparency and dimensional stability.

Co-Polyester Coated surface Core layer Untreated layer

PRODUCT FEATURES:

Superior transparency and high gloss, Good dimensional stability. Excellent Machinability. Excellent Adhesion of inks and Adhesive

APPLICATIONS:

Flexible packaging
Printing, Metallizing & lamination
Frozen food packaging
Hot filled application like Tomato Ketchup,
juices, etc.

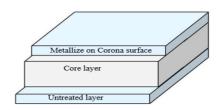
	PROPERTIES		UNIT				TYPICAL	VALUES				TEST METHOD
			Microns	8	10	11	12	15	19	23	30	
	Thickness		Gauge	32	40	44	48	60	76	92	120	ASTM D 374
DUNGLOAL	Grammage		g/m²	11.2	14	15.4	16.8	21	26.6	32.2	42	* 4 0 14 4
PHYSICAL	Yield		m²/kg	89.3	71.4	64.9	59.5	47.6	37.5	31.1	23.81	* ABIM
	Coefficient of Friction (F	Coefficient of Friction (Film/Film)				l	<0	.50				ASTM D 1894
	Surface Tension (Coate	ed Side)	100				5	8				467440 0570
	Surface Tension (Plain	side)	dynes/cm				4	4	9			ASTM D 2578
0071041	Haze		0/				≤4	1.0				ASTM D 1003
OPTICAL	Transmittance	73/	%				9	0				ASTM D 2457
	Tensile Strength at *TI	*MD	1/2				20	000	-4	37.5		
		*TD	kg/cm ²				21	.00				ASTM D 882
		MD					2	9				ASTIVI D 662
MECHANICAL	TD		- kpsi				3	0				
	Elementian et Bereit	Elongation at Break TD					1:	15				ASTM D 882
	Elongation at Break			100								
TUEDAMA	The second Oberial and	MD	0/	2.4								ABIM
THERMAL	Thermal Shrinkage	TD	%	0.4								(150°C ,30 min)
	Water Vapor Permeabil	ity	g/m²/24h	<60	<50	<40	<40	<40	<35	<30	<25	ASTM F 1249
BARRIER	(W.V.T.R.)	,	g/100in²/24h	<3.8	<3.2	<2.5	<2.5	<2.5	<2.2	<1.9	<1.6	(38°C / 90% RH)
	Oxygen Transmission F	Oxygen Transmission Rate		<140	<135	<130	<130	<130	<110	<90	<70	ASTM D 3985 (23°C / 0% RH)
	(O.T.R.)		cc/in²/24h	<8.8	<8.4	<8.1	<8.1	<8.1	<6.9	<5.6	<34.4	
	* ABIM – A	kij BOPET Int	ernal Method		*M	D – Machine D	irection		*TD – Tra	nsverse Direc	tion	

a Biaxially oriented Polyester Metallized film. Metallize on corona treated surface having excellent barrier properties enhanced metal to film bonding, excellent machineability and high Barrier.

PRODUCT FEATURES:

Excellent light barrier enhances self-life, good optical density, outstanding barrier to moisture gas and odors

APPLICATIONS: Metallized films is suitable for flexible packaging application like snacks, chips, extruded food &tea etc.



PROPERTIES		UNIT				TYPICAL	VALUES				TEST METHOD.
Thirtenan		Microns	8	10	11	12	15	19	23	30	ACTAA D 274
Inickness		Gauge	32	40	44	48	60	76	92	120	ASTM D 374
Grammage		g/m²	11.2	14	15.4	16.8	21	26.6	32.2	42	* ABIM
Yield		m²/kg	89.3	71.4	64.9	59.5	47.6	37.5	31.1	23.81	* ABIIVI
Coefficient of Friction (Film/Film)						0.	54				ASTM D 1894
Surface Tension (Pla	ain Side)	dun a a la m				4	.4				ASTM D 2578
Surface Tension (Me	etal side)	dynes/cm				5	2	The same			ASTIVI D 2578
•		%)			2	.2	B			* ABIM
Tensile Strength *MD *TD	*MD	ka/am²				20	000				£ 100 m
	kg/cm²	2100							ASTM D 882		
at Break	MD	knoi				2	.9	-			A311VI D 662
	TD	κροι				3	0				
Elongation at	MD	0/0	110								ASTM D 882
Break	TD	70				10	00				
Thermal	MD	0/0				2	.4				ABIM
Shrinkage	TD	,,				0	.4				(150°C ,30 min)
Water Vapor Permea	ability	a/m2/24h				.1	. 0				ASTM F 1249
(W.V.T.R.) BARRIER		y/111-/2411				<]	1.0				(38°C / 90% RH)
Oxygen Transmissio	n Rate	cc/m ² /24h				<1	1.0				ASTM D 3985 (25°C / 0% RH)
	Thickness Grammage Yield Coefficient of Friction Surface Tension (Planation of Price of Pr	Thickness Grammage Yield Coefficient of Friction (Film/Film) Surface Tension (Plain side) Surface Tension (Metal side) Optical Density (Tolerance±5%) *MD Tensile Strength at Break MD Elongation at MD Break TD Thermal MD Shrinkage TD Water Vapor Permeability (W.V.T.R.) Oxygen Transmission Rate	Microns Gauge Grammage g/m² Yield m²/kg Coefficient of Friction (Film/Film) surface Tension (Plain side) Surface Tension (Metal side) dynes/cm Optical Density (Tolerance±5%) % Tensile Strength at Break *TD kg/cm² Elongation at Break MD kpsi Thermal MD Shrinkage MD % Water Vapor Permeability (W.V.T.R.) g/m²/24h Oxygen Transmission Rate cc/m²/24h	Microns 8 Gauge 32 Grammage g/m² 11.2 Yield m²/kg 89.3 Coefficient of Friction (Film/Film) surface Tension (Plain side) dynes/cm Surface Tension (Metal side) dynes/cm Optical Density (Tolerance±5%) % Tensile Strength at Break *TD kg/cm² TD kpsi Elongation at Break MD % Thermal MD Shrinkage TD % Water Vapor Permeability (W.V.T.R.) g/m²/24h	Microns 8	Microns 8	Microns 8	Thickness Microns 8	Microns 8	Microns 8	Thickness Microns 8

		FOOD PACKAGIN	NG			
Category	Film	Film Description	Thickness (µm)			
Category	Туре	riiii bescription	Standard	Restricted		
	THo	Transparent Both Side Heat Sealable, One Side Corona Treated BOPP Film	15, 18, 20, 25, 30, 40			
	TNo	Transparent Non Heat Sealable, One Side Corona Treated BOPP Film	15, 18, 20, 25, 30, 40			
Transparent	THoW	Transparent Both Side Heat Sealable, One Side Mild Corona Treated BOPP Film for Overwrapping	18, 20, 25, 30			
rransparent	TNb-PL	Transparent Thin Non Heat Sealable, Both Side Corona Treated BOPP Film	10			
	TNn	Transparent Non Heat Sealable, One Side Mild Corona Treated BOPP Film	25, 30			
	Matt-WL	Matt Both Side Heat Sealable, one side Corona Treated BOPP Film	15, 18, 20			
Matt	Matt-PL	Matt One Side Heat Sealable, Both Side Corona Treated BOPP Film	12, 15			
	PRL	Pearlized Cavitated Both Side Heat Sealable, One Side Corona Treated BOPP Film	25, 30			
White Voided	PRL-LD	Pearlized Cavitated Both Side Heat Sealable, One Side Corona Treated, Low Density BOPP Film	25, 30			

FOOD PACKAGING										
Film	Film Bernietien	Thickne	ss (µm)							
Туре	Film Description	Standard	Restricted							
WSo	Solid White Both Side Heat Sealable, One Side Corona Treated BOPP Film	20, 40								
MZ	Standard Barrier, Metallized One Side, Other Side Heat Sealable BOPP Film	15, 18, 20, 25, 30, 40								
MZ-111	Standard Barrier, Metallized One Side, Other Side Improved SIT, Heat Sealable BOPP Film	15, 18								
мz-нв	Medium Barrier, Metallized One Side, Other Side Heat Sealable BOPP Film	15, 18								
мz-инв	High Barrier, Metallized One Side, Other Side Heat Sealable BOPP Film	15, 18								
	WSo MZ MZ-111 MZ-HB	Film Film Description Type Solid White Both Side Heat Sealable, One Side Corona Treated BOPP Film Standard Barrier, Metallized One Side, Other Side Heat Sealable BOPP Film MZ-111 Standard Barrier, Metallized One Side, Other Side Improved SIT, Heat Sealable BOPP Film MZ-HB Side, Other Side Heat Sealable BOPP Film	Film Description Type Solid White Both Side Heat Sealable, One Side Corona Treated BOPP Film Standard Barrier, Metallized One Side, Other Side Heat Sealable BOPP Film MZ-111 Standard Barrier, Metallized One Side, Other Side Improved SIT, Heat Sealable BOPP Film MZ-HB Side, Other Side Heat Sealable SI, 18							

	СРР										
6.1	Film	Film Barrietia	Thickne	ss (µm)							
Category	Туре	Film Description	Standard	Restricted							
	СТНо	Transparent Both Side Heat Sealable, One Side Corona Treated CPP Film	20, 25, 30, 40								
Transparent											
	смz	Metallized One Side, Other Side Heat Sealable CPP Film	15, 18, 20, 25, 30, 40, 50								
Metallized	смz-нв	High barrier Metallized One Side, Other Side Heat Sealable CPP Film	20, 25								
	CMZ-WS	White Metallized One Side, Other Side Heat Sealable CPP Film	40								
Solid White	CWSo	Solid White Both Side Heat Sealable, One Side Corona Treated CPP Film	20, 25								

			LABELS							
C-1	Label	Film	Film Description	Thickn	ess (µ)					
Category	Application	Application	Application	Application	Application	Туре	Film Description	Standard	Restricted	
	WAL	THoL	Transparent Label One Side Corona Treated BOPP Film	40						
Transparent	WAL	TNoL	Transparent Label High Gloss One Side Corona Treated BOPP Film	40						
White Voided	WAL	PWL	White Cavitated Label, One Side Corona Treated BOPP Film	38						
						L				
Solid White										
Solid Willte						ŀ				
Metallized										
	White Voided Solid White	Transparent WAL White Voided Solid White	Category Label Application Type WAL THOL Transparent WAL TNOL White Voided WAL PWL Solid White	Category Application Type WAL THOL Transparent Label One Side Corona Treated BOPP Film Transparent WAL TNOL White WAL PWL White Cavitated Label, One Side Corona Treated BOPP Film White Voided Solid White	Category Application Type WAL THOL Transparent Label One Side Corona Treated BOPP Film Transparent WAL TNOL Transparent Label High Gloss One Side Corona Treated BOPP Film White Wal PWL White Cavitated Label, One Side Corona Treated BOPP Film White Voided Solid White	Category Application Type Film Description Thickness (µ) WAL THOL Transparent Label One Side Corona Treated BOPP Film Transparent WAL TNOL Transparent Label High Gloss One Side Corona Treated BOPP Film White White Voided White Cavitated Label, One Side Corona Treated BOPP Film White Corona Treated BOPP Film Solid White				

INDUSTRIAL									
			Thickne	ess (µ)					
Category	Film Type	Film Description	Standard	Restricted					
	CG44H	Cigarette Inner Wrap, Both Side Sealable Non-Treated BOPP Film	20						
Transparent	THo-SG	Transparent Both Side Heat Sealable, One Side Corona Treated BOPP Film for Soap Grade	20, 40						
	TNoT	Transparent Non Heat Sealable, One Side Corona Treated BOPP Film for Tape Grade	23, 25						
Transparent	PRL-SG	Pearlized Cavitated Both Side Heat Sealable, One Side Corona Treated BOPP Film for Soap Wrap	25						

		DEVELO	PMENTAL	
Category	Application	Film Type	Film Description	Thickness (µ)
	Cigarette Over Wrap	CG99N	Cigarette Naked Wrap, Both Side Sealable Non-Treated BOPP Film	23
Fransparent				
White				
/oided				
Metallized				