

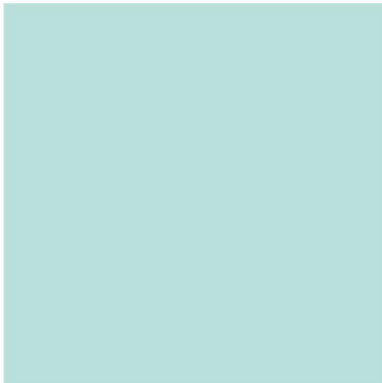
Merlin S Tech

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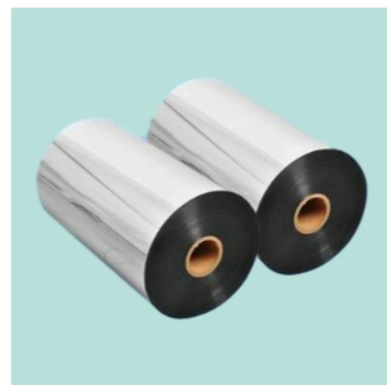
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Merlin S Tech



SATISFYING
YOUR
PACKAGING
NEEDS

BOPP
FILMS



Merlin S Tech

ABOUT COMPANY

We are specialized in plastic packaging products including BOPP film, CPP film, PET film, etc.

We work with leading manufacturers of China, aiming to bring the highest quality packaging products to the world.

With the "protecting the earth" vision in our heart, we are also dedicated to bringing bio-degradable, compostable plastic products to the worldwide packaging industry.

We offer BOPP Glossy Film, BOPP Matt Film, BOPP Heat Sealable Film, BOPP Functional Film such as BOPP Anti-Fogging film, BOPP Tobacco Film. We also offer all kinds of Metallized Film such as Metallized BOPP Film, Metallized CPP, Metallized PET, etc. Welcome to contact us for more details!





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BOPP GLOSSY FILM



GL01-Bag Making Film



GL02-Flower Film



GL03-Adhesive Tape Film



GL04-Lamination Film

BOPP Glossy Film, also known as BOPP Plain Film, is the most widely used product. It is waterproof. The non-waterproof label material can be made waterproof by laminating Glossy Film on it. Glossy Film makes the surface of the label sticker brighter, more high-end, and attractive; It can protect the printed ink content, making the surface of the label scratch-resistant and more durable. Therefore, Glossy Film is widely used in various printing and food packaging.

Features:

- Glossy Film is waterproof;
- Glossy Film makes the surface of the label bright;
- Glossy Film can protect the printed content.

TDS for GL02-Bag Making Film

Properties		Test Method	Unit	Typical Values					
Thickness		Factory	μm	17	30	40	60	70	80
Thickness Variation		Astm-252-78	%	±2.5	±2.5	±2.2	±1.5	±1.3	±1.1
Yield		Factory	m ² /kg	64.6	36.6	27.5	18.3	15.7	13.7
Tensile Strength	MD	Astm D-882	Mpa	155	155	155	135	125	125
	TD	Astm D-882	Mpa	300	300	300	290	280	260
Elongationat Break	MD	Astm D-882	%	160	160	180	200	220	220
	TD	Astm D-882	%	55	60	60	65	65	65
Friction Coefficient	T/T-US	Astm D-1894	-	0.30	0.30	0.30	0.30	0.30	0.30
	T/O-US	Astm D-1894	-	0.40	0.40	0.40	0.40	0.40	0.40
Heat Shrinkage	MD	Astm D-1204		4.0	4.0	4.0	4.0	4.0	3.5
	TD	Astm D-1204		1.0	1.0	1.0	2.0	2.0	2.0
Haze		Astm D-1003	%	1.1	1.1	1.3	1.5	1.5	1.5
Gloss		Astm D-2457	%	92	92	92	92	92	92
Wetting Tension		Astm D-2578	-	38	38	38	38	38	38
			Dyn	38	38	38	38	38	38

Note: The above values are obtained in our laboratory test which is for formative purpose and not in guarantee or warranty in any specific condition. Users are advised to conduct their own testing to determine product suitability. Contact us for more TDS.

BOPP MATT FILM



MA01-Lamination Film



MA02-Printing Film

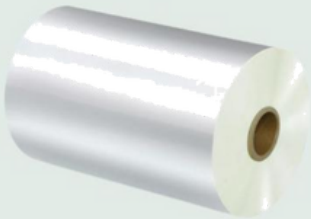
BOPP Matte Film, mainly achieves the effect of matting by absorbing and scattering optical fibers. It can improve the grade of the printed surface and is used in food or high-end packaging. It is often used in combination with other films such as CPP, BOPET, etc.

TDS for MA01-Lamination Film

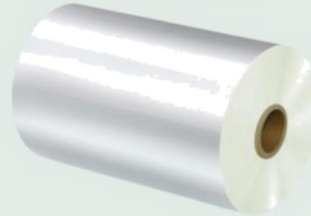
Properties		Test Method	Unit	Typical Values			
Thickness		Factory	μm	15	18	20	30
Thickness Variation		Astm-252-78	%	±3.5	±3.	±3.0	±3.5
Yield		Factory	m ² /kg	73.3	0	55.0	36.6
Tensile Strength	MD	Astm D-882	Mpa	120	61.	120	120
	TD	Astm D-882	Mpa	260	0	260	260
Elongation at Break	MD	Astm D-882	%	170		170	170
	TD	Astm D-882	%	65	65	65	65
Friction Coefficient	T/T-US	Astm D-1894	-	0.30	0.3	0.30	0.30
	T/O-US	Astm D-1894	-	0.60	0	0.60	0.60
Heat Shrinkage	MD	Astm D-1204		4.0	0.6	4.0	4.0
	TD	Astm D-1204	%	1.5	0	1.5	1.5
Haze		Astm D-1003	%	78	78	78	78
Gloss		Astm D-2457	-	3	3	3	3
Wetting Tension		Astm D-2578	Dyn	38	38	38	38

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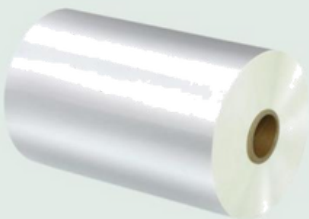
BOPP HEAT SEALABLE FILM



HS01-Straw Packing Film



HS02-Tissue Wrapping Film



HS03-Double Sides Heat Sealable



HS04-Single Side Heat Sealable

BOPP Heat Sealable Film is widely used in packaging, printing and laminating for food and non-food application. It has both sides heat sealable properties and specially developed to suit high speed packaging machine.

Features:

- Transparent, both side heat sealable
- One side corona treatment, normal sealing temperature
- Low static, excellent flatness, good heat seal strength

TDS for HS03-Double Sides Heat Sealable Film

Properties		Test Method	Unit	Typical Values				
Thickness		Factory	μm	20	25	30	40	50
Thickness Variation		Astm-252-78	%	±3.0	±2.5	±2.5	±2.5	±2.0
Yield		Factory	m ² /kg	54.9	43.9	36.6	27.5	22.0
Tensile Strength	MD	Astm D-882	Mpa	140	140	140	140	135
	TD	Astm D-882	Mpa	280	280	280	290	285
Elongationat Break	MD	Astm D-882	%	175	175	175	175	175
	TD	Astm D-882	%	65	65	65	65	65
Friction Coefficient	T/T-US	Astm D-1894	-	0.3	0.3	0.3	0.3	0.3
	T/O-US	Astm D-1894	-	0.4	0.4	0.4	0.4	0.4
Heat Shrinkage	MD	Astm D-1204		4.0	4.0	4.0	4.0	4.0
	TD	Astm D-1204	%	1.5	1.5	1.5	1.5	1.5
Haze		Astm D-1003	%	1.5	1.7	2.0	2.0	2.2
Sealing Strength		Factory	N/15mm	3.0	3.0	3.0	3.0	3.0
Sealing Temperature		Factory	°C	115	115	115	115	115
Gloss		Astm D-2457	-	92	92	92	85	85
Wetting Tension		Astm D-2578	Dyn	38	38	38	38	38

Note: The above values are obtained in our laboratory test which is for formative purpose and not in guarantee or warranty in any specific condition. Users are advised to conduct their own testing to determine product suitability. Contact us for more TDS.

BOPP FUNCTIONAL FILM



FU01-Pearlized Label Film



FU02-Pearlized Film



FU03-Anti-Fogging Film



FU04-Cigarette Film

BOPP Functional Film is a category of films with special functional masterbatch.

TDS for FU03-Anti-Fogging Film

Properties		Test Method	Unit	Typical Values			
Thickness		Factory	μm	18	20	25	30
Thickness Variation		Astm-252-78	%	±3.0	±3.0	±2.5	+2.5
Yield		Factory	m ² /kg	61.1	54.9	44.0	36.6
Tensile Strength	MD	Astm D-882	Mpa	140	140	140	140
	TD	Astm D-882	Mpa	280	280	280	280
Elongationat Break	MD	Astm D-882	%	175	175	175	175
	TD	Astm D-882	%	65	65	65	65
Friction Coefficient	T/T-US	Astm D-1894	-	0.30	0.30	0.30	0.30
	T/O-US	Astm D-1894	-	0.30	0.30	0.30	0.30
Heat Shrinkage	MD	Astm D-1204		4.0	4.0	4.0	4.0
	TD	Astm D-1204	%	2.0	2.0	2.0	2.0
Haze		Astm D-1003	%	1.2	1.4	1.7	2.0
Sealing Strength		Factory	N/15mm	3.0	3.0	3.0	3.0
Gloss		Astm D-2457	-	92	92	92	92
Wetting Tension		Astm D-2578	Dyn	38/36	38/36	38/36	38/36

TDS for FU04-Cigarette Film

Properties		Test Method	Unit	Typical Values
Thickness		Factory	μm	22
Thickness Variation		Astm-252-78	%	±2.5
Yield		Factory	m ² /kg	50.3
Tensile Strength	MD	Astm D-882	Mpa	140
	TD	Astm D-882	Mpa	280
Elongation at Break	MD	Astm D-882	%	175
	TD	Astm D-882	%	65
Friction Coefficient	T/T-US	Astm D-1894	-	0.2
	T/O-US	Astm D-1894	-	0.2
Heat Shrinkage	MD	Astm D-1204		4.0
	TD	Astm D-1204	%	2.0
Haze		Astm D-1003	%	2.0
Sealing Strength		Factory	N/15mm	3
Gloss		Astm D-2457	-	90

Note: The above values are obtained in our laboratory test which is for formative purpose and not in guarantee or warranty in any specific condition. Users are advised to conduct their own testing to determine product suitability. Contact us for more TDS.

CPP FILM



CP01-Tissue Wrap Film



CP02-Retort Film

Cast Polypropylene (CPP) films offer excellent heat seal strength, good thermal stability, good puncture resistance, good clarity and fair barrier properties. The film type also has good yield economics owing to its low density.

TDS for CP02-Retort Film

		Test Method	Unit	Typical Values		
Thickness		ASTM D 2673	μm	20	25	30
Density		ASTM D 792	g/cm ³	0.9	0.9	0.9
Haze Gloss		ASTM D 1003	%	2.8	3.6	4.2
		ASTM D2457	45o	85	85	85
Tensile Strength	MD	Astm D-882	psi	8800	8500	8400
	TD	Astm D-882	psi	5100	5000	4950
Elongationat Break	MD	Astm D-882	%	550	580	600
	TD	Astm D-882	%	670	680	700
Secant Modulus	MD	ASTM D 882	psi	88000	85000	84000
	TD	ASTM D 882	psl	77000	75000	74500
C.O.F		ASTM D 1894	—	0.22	0.22	0.2
Wetting tension		ASTM D 2578	Dyne/cm	38	38	38
Heat seal temperature		SJ Method	°C	132	132	132
WVTR		ASTM F 1249	g/100in ² /24h	1	0.8	0.67
OTR		ASTM D 3985	cc/100in ² /24h	240	190	160

Note: The above values are obtained in our laboratory test which is for formative purpose and not in guarantee or warranty in any specific condition. Users are advised to conduct their own testing to determine product suitability. Contact us for more TDS.

METALLIZED FILM



ME01- Metallized BOPP Film



ME02- Metallized CPP Film

Metallized film is a composite flexible packaging material formed by coating a layer of extremely thin metallic aluminum on the surface of a plastic film using a special process. The most commonly used processing method is vacuum aluminum plating to make the surface of the plastic film has a metallic luster. It is mainly used in the packaging of dry and puffed foods such as biscuits and the outer packaging of some medicines and cosmetics.

TDS for ME01-Metallized BOPP Film

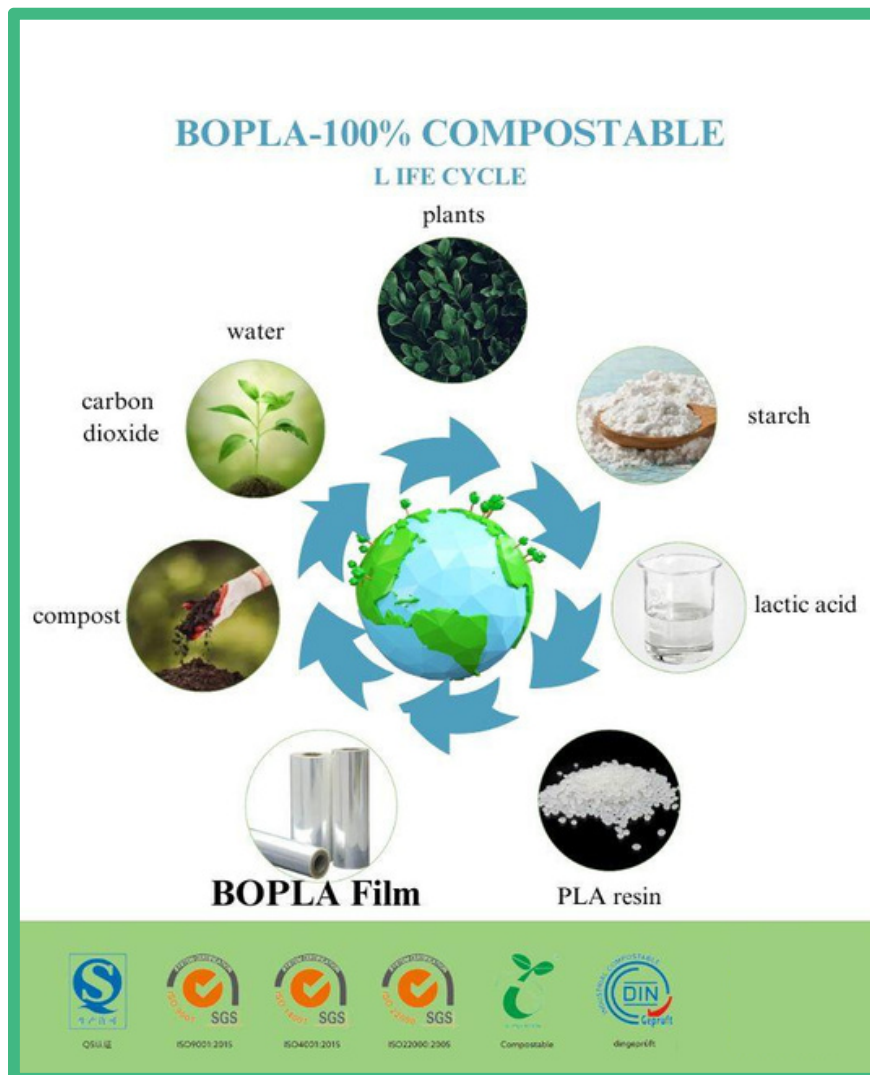
Properties		Test Method	Unit	Typical Values				
Thickness		Factory	μm	18	20	25	30	35
Thickness Variation		Astm-252-78	%	±3	±3	±3	±3	±3
Yield		Factory	m ² /kg	61.05	54.95	43.96	36.63	31.40
OD		Astm D-1003	-	1.8-2.2	1.8-2.2	1.8-2.2	1.8-2.2	1.8-2.2
Tensile Strength	MD	Astm D-882	Mpa	130	130	130	130	125
	TD	Astm D-882	Mpa	240	240	240	240	240
Elongationat Break	MD	Astm D-882	%	200	200	200	200	200
	TD	Astm D-882	%	70	70	70	70	70
FrictionCoefficient O/O		Astm D-1894	-	0.50	0.50	0.50	0.50	0.50
Heat Shrinkage	MD	Astm D-1204		4.0	4.0	4.0	4.0	4.0
	TD	Astm D-1204	%	2.0	2.0	2.0	2.0	2.0

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BIODEGRADABLE FILM

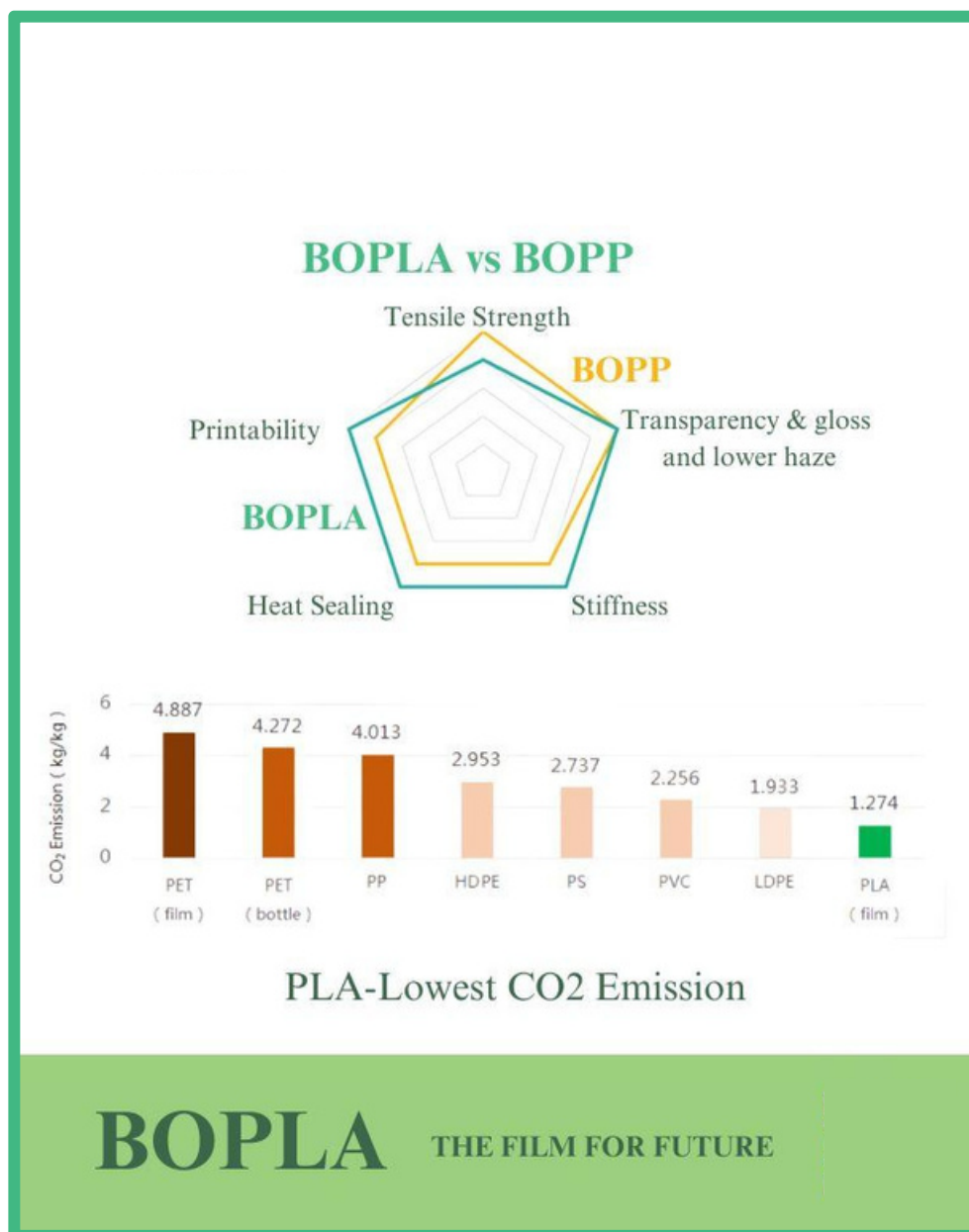
BOPLA-A high-quality Biaxially Oriented Polylactic Acid Film

The product can effectively meet the needs of downstream customers for high-quality biodegradable membrane materials, and also provide a strong solution for China's 2030 carbon peak and 2060 carbon neutrality goals. It originates from plants, the source of raw materials is sufficient and renewable, the product can be biodegradable, after use can be composted, at a certain temperature or oxygen and microbial action to degrade into carbon dioxide and water, to achieve the material cycle in nature, the environmental impact is small, so it is an ideal green polymer material.



Features

- High Printability
- Good Heat Sealing
- High Stiffness
- High Transparency & gloss, low haze
- Lowest CO2 emission



Application

The infographic features a central stylized plant with a green stem and two leaves. The stem branches out into two vertical lines, each supporting four application categories. Each category is represented by a small image and a green label. The applications are:

- Flower Wrap**: A bouquet of yellow flowers wrapped in clear BOPLA film.
- Tape**: Three rolls of BOPLA tape in yellow, white, and orange.
- Box Window**: A cardboard box with a clear BOPLA window.
- Bag Making**: Two green BOPLA bags, one of which is filled with green beans.
- Paper Laminate**: A stack of blue and white patterned paper laminated with BOPLA.
- Candy Kinks**: A bowl of colorful, kinked BOPLA candy wrappers.
- Protective**: A clear BOPLA sheet being applied to a black smartphone.
- Label**: A roll of green BOPLA material with printed labels.

BOPLA MULTIPLE APPLICATIONS