

OA1 is the single side corona treated sequential BOPA with excellent overall properties that are suitable for general packing applications.

GOOD FLEX CRACK RESISTANCE

Suitable for different packaging configurations

GOOD STRENGTH AND PUNCTURE/IMPACT RESISTANCE

Capable of heavy packaging, sharp or rigid products with excellent pack security

HIGH GAS BARRIER

Extend shelf life

EXCELLENT APPLICATIONS AT HIGH AND LOW TEMPERATURE

Suitable for frozen food and pasteurization/boiling application

VARIED THICKNESS

Thickness tailored for different strength requirements-cost efficient

GOOD CLARITY

Better sensory quality



PRODUCT PARAMETERS

Thickness/ μm	Width/mm	Treatment	Retortability	Printability
10-30	300-2100	single side corona	$\leq 100^{\circ}\text{C}$	$\leq 6\text{colors}$ (recommended)

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



OA1双向逐步拉伸法制得的印刷复合型尼龙薄膜，厚度可在10~30 μm 范围内根据需要选择。

应用范围

OA1-15 μm 可用于6色以内(含6色)的套色印刷、制袋封边宽度 $\leq 3\text{cm}$ 、不需要有对框要求的普通包装制品，可用于水煮产品，煮后翘脚、卷曲程度小；超薄型(10/12 μm)可用作制作气球、镀铝尼龙等制品；增强型(25/30 μm)适用于重物包装或内容物带有骨头、尖刺等对耐穿刺、高强度有要求的包装等。

产品特性

具有良好的阻氧性能

具有良好的印刷性能

优异的拉伸性能、抗冲击、耐穿刺性能

优异的抗扭曲性能，强韧性

良好的透明度和光泽度



封边宽度/cm	厚度/ μm	宽幅/mm	表面处理	耐蒸煮性	印刷性
≤ 3	10-30	300-2100	单/双面电晕	可水煮	≤ 6 色

备注：耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。



OA2 is the both side corona treated sequential BOPA with excellent overall properties. It is generally used as an intermediate layer and surface process like coating and metalization application.

GOOD FLEX CRACK RESISTANCE

Suitable for different packaging configurations

GOOD STRENGTH AND PUNCTURE/IMPACT RESISTANCE

Capable of heavy packaging, sharp or rigid products with excellent pack security

HIGH GAS BARRIER

Extend shelf life

EXCELLENT APPLICATIONS AT HIGH AND LOW TEMPERATURE

Suitable for frozen food and pasteurization/boiling application

VARIED THICKNESS

Thickness tailored for different strength requirements-cost efficient

GOOD CLARITY

Better sensory quality

CUSTOMIZATION

Better meet customers' requirements



PRODUCT PARAMETERS

Thickness/ μm	Width/mm	Treatment	Retortability	Printability
10-30	300-2100	single side corona	$\leq 100^{\circ}\text{C}$	$\leq 6\text{colors}$ (recommended)

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



OA2双向逐步拉伸法制得的复合型尼龙薄膜,厚度可在10~30 μ m范围内根据需要进行选择。

应用范围

OA2-15 μ m可用于空白袋或3色以内(含3色)的套色印刷、制袋封边宽度 ≤ 1 cm、不需要有对框要求的软包装制品,如:空白袋、真空冷冻袋、水产品袋、真空压缩袋。客户可根据包装强度要求及包装用途选择不同厚度:OA2-15 μ m用作常规包装制品;超薄型(10/12 μ m)可用作镀铝、制作气球等;增强型(25/30 μ m)适用于重物包装或内容物带有骨头、尖刺等对耐穿刺、高强度有要求的包装等。



产品特性

具有良好的氧气阻隔性
优异的拉伸性能、抗冲击、耐穿刺性能
优异的抗扭曲性能,强韧性
温度适用范围广
良好的透明度和光泽度



封边宽度/cm	厚度/ μ m	宽幅/mm	表面处理	耐蒸煮性	印刷性
≤ 1	10-30	300-2100	单/双面电晕	不建议水煮或蒸煮	≤ 3 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。



HOA1 is the 15 μ m sequential BOPA with excellent mechanical strength and isotropic physical properties.

EXCEPTIONAL MECHANICAL STRENGTH AND PUNCTURE/IMPACT RESISTANCE

Capable of heavy packaging, sharp or rigid products with excellent pack security

GOOD DIMENSIONAL STABILITY

Excellent performance in printing and various coating processes

ISOTROPIC PHYSICAL PROPERTIES

Minimum distortion after retort



PRODUCT PARAMETERS

Thickness/ μ m	Width/mm	Treatment	Retortability	Printability
15	300-2100	single/both side corona	$\leq 121^{\circ}\text{C}$	≤ 9 colors

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



HOA1是双向逐步拉伸法制成的均衡型尼龙薄膜。

应用范围

HOA1-15 μ m可用于9色以内(含9色)的套色印刷、制袋封边宽度 ≤ 6 cm、有对框要求的高档包装制品,适用于水煮及121 $^{\circ}$ C以下普通高温蒸煮,煮后不易翘角、卷边。如:印刷精美的休闲风味食品包装、调料酱料包等,BOPA再加工(如PVDC涂布BOPA用于高阻隔食品包装)等。



产品特性

- 具有良好的氧气阻隔性
- 具有优秀的印刷性能和均衡性
- 优异的拉伸性能、抗冲击、耐穿刺性能
- 优异的抗扭曲性能,强韧性
- 温度适用范围广
- 良好的透明度和光泽度



封边宽度/cm	厚度/ μ m	宽幅/mm	表面处理	耐蒸煮性	印刷性
≤ 6	15	300-2100	单/双面电晕	$\leq 121^{\circ}\text{C}$	≤ 9 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。

SHA is the Biaxial Oriented Polyamide 6 film produced by mechanical simultaneously stretching technology.

GOOD OXYGEN/AROMA BARRIER

Extend shelf life, better freshness

OUTSTANDING ISOTROPY PERFORMANCE IN PRINTING AND RETORT

Excellent covering performance accurate printing registration

GOOD ANTI-PUNCH PROPERTIES

HIGH FLEX-CRACK RESISTANCE

WIDE TEMPERATURE RANGE IN APPLICATION

EXCELLENT TRANSPARENCY AND GLOSS

Minimum distortion after retort



PRODUCT PARAMETERS

Thickness/ μm	Width/mm	Treatment	Retortability	Printability
15	300-2100	single/both side corona	$\leq 121^{\circ}\text{C}$	≤ 12 colors

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



SHA是通过机械同步拉伸工艺生产的BOPA产品。

应用范围

可用于12色以内(含12色)的套色印刷、制袋封边宽度 $\leq 10\text{cm}$ 、有对框要求的精美包装制品,适用于水煮及 125°C 以下高温蒸煮,煮后不易翘角、卷边。推荐用于单袋容量小于 2kg 的非重物包装制品。

如:高档精美印刷、普通高温蒸煮袋、各类精美印刷杯盖膜(如果冻盖膜、酒糟盖膜)等。

产品特性

具有良好的氧气阻隔性

具有优秀的印刷性能和均衡性

良好的拉伸性能、抗冲击、耐穿刺性能

优异的抗扭曲性能

温度适用范围广

良好的透明度和光泽度



封边宽度/cm	厚度/ μm	宽幅/mm	表面处理	耐蒸煮性	印刷性
≤ 6	15	300-2100	单/双面电晕	$\leq 121^{\circ}\text{C}$	≤ 12 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。



LHA is the BOPA produced in state-of-the-art LISIM simultaneous stretching process. The film has good dimensional stability and physical isotropy.



THERMAL AND PHYSICAL ISOTROPY

Minimum distortion after retort

EXCEPTIONAL STRENGTH AND PUNCTURE/IMPACT RESISTANCE

Capable of packaging heavy, sharp or rigid products with excellent pack security

LESS SENSITIVE TO MOISTURE AND HEAT-GOOD DIMENSIONAL STABILITY

Excellent converting performance, accurate printing registration



PRODUCT PARAMETERS

Thickness/ μm	Width/mm	Treatment	Retortability	Printability
15, 25	300-2100	single/both side corona	$\leq 135^{\circ}\text{C}$	≤ 12 colors

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



LHA是通过磁驱动线性电机同步双向拉伸工艺生产的BOPA产品。

应用范围

可用于12色以内(含12色)的套色印刷、制袋封边宽度 $\leq 10\text{cm}$ 、有对框要求的精美包装制品,适用于水煮及 135°C 高温蒸煮,煮后不易翘角、卷边。

如:高档精美印刷、高温蒸煮袋、各类精美印刷杯盖膜、对印刷精度和机械强度要求均很高的精美印刷重物包装,BOPA再加工(如PVDC涂布BOPA用于高阻隔食品包装)等。

产品特性

具有优异的印刷性能和均衡的物理性能

优异的拉伸性能、抗冲击、耐穿刺性能

优异的抗扭曲性能,强韧性

具有良好的氧气阻隔性

温度适用范围广

良好的透明度和光泽度



封边宽度/cm	厚度/ μm	宽幅/mm	表面处理	耐蒸煮性	印刷性
≤ 10	15,25	300-2100	单/双面电晕	$\leq 135^{\circ}\text{C}$	≤ 12 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。



EHA is specially designed and produced in state-of-the-art LISIM simultaneous stretching process, which has two types of EHAp and EHAr.



HIGH GAS/AROMA BARRIER

Extend shelf life, better freshness

HIGH MECHANICAL STRENGTH AND PUNCTURE/IMPACT RESISTANCE

Capable of packing heavier/larger products, rigid or sharp bone-in products

GOOD DIMENSIONAL STABILITY

Accurate reverse printing

NO BARRIER LOSS UPON FILM DEFORMATION

Stable barrier

THIN BUT MULTI-FUNCTIONAL

Cost effective



PRODUCT PARAMETERS

Type	Thickness/ μm	Width/mm	Treatment	OTR/ $\text{cc}\cdot\text{m}^2\cdot\text{day}^{-1}$ (23 °C, 50%RH)	Boiling	Printability
EHAp	15	300-2100	single/both side corona	< 2	85°C pasteurization	≤ 12 colors
EHAr	15	300-2100	single/both side corona	< 8	100°C water boil	≤ 12 colors

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



EHA是基于先进的磁驱动线性电机同步双向拉伸技术而设计的独特产品,其分为EHAp(普通型)和EHAr(水煮型)两种产品型号。

应用范围

可用于对气体高阻隔性及保香保味有要求的食品包装,如水果果冻、热灌装酱料、奶酪、糕点、宠物食品等包装,面膜等日化包装,高档气球包装及VIP真空绝热板等工业包装。

产品特性

优异的氧气阻隔性

延长食品的保质期,降低食品添加剂的添加量

优异的保香性

长时间保留食品的原始风味

显著节省材料的使用

材料更环保

继承BOPA良好的力学性能和印刷性能

可用于12色精美印刷

揉搓、挠曲变形后阻隔性基本不变

一层仅15 μ m的薄膜解决印刷、阻隔和强度问题

简化复合结构,节省成本



类型	厚度/ μ m	宽幅/mm	表面处理	OTR/ $\text{cc}\cdot\text{m}^{-2}\cdot\text{day}^{-1}$ (23°C, 50%RH)	耐蒸煮性	印刷性
EHAp	15	300-2100	单/双面电晕	<2	$\leq 85^{\circ}\text{C}$ 巴氏杀菌	≤ 12 色
EHAr	15	300-2100	单/双面电晕	<8	$\leq 100^{\circ}\text{C}$ 水煮	≤ 12 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。



TSA is a 15 μ m BOPA featuring highly linear and easy tearing in its MD direction. It is especially suitable for reclosable packaging and any other applications requiring an easy, linear and neat opening. With a build-in linear tearing feature, TSA eliminates the need to use any additional process or specialty material to make a linear opening pouch.



BUILD-IN LINEAR TEAR FEATURE

Eliminate the need to use additional processes and specialty materials

COMPATIBLE WITH DIFFERENT LAMINATE PARTNERS

Suitable for a wide range of packaging configurations and applications

EXCELLENT MECHANICAL STRENGTH AND PUNCTURE/IMPACT RESISTANCE

Retain the strength and toughness of BOPA, reduce the risk of breakage

EXCELLENT DIMENSIONAL STABILITY

Suitable for various printing and converting processes minimum pouch distortion after retort



PRODUCT PARAMETERS

Thickness/ μ m	Width/mm	Treatment	Retortability	Printability
15	300-2100	single/both side corona	$\leq 135^{\circ}\text{C}$	≤ 12 colors

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



TSA是通过特定工艺制成的在MD方向具有高度直线撕裂性能的双向拉伸尼龙薄膜。

应用范围

需要直线开口特性的各类包装,如防止撕开时溅出/溢出的汤汁、酱料、粉末类包装;需要开口平整的拉链袋或其他可重复使用包装;防止撕开时破坏内容物的食品、药品、电子类包装等。



产品特性

无需与其他特种材料或加工设备配合
即可实现包装的直线撕裂性能

适用于多种复合结构

该特性不影响BOPA的强度和其他力学性能

尺寸稳定性优良

具有很好的印刷适应性

耐蒸煮性好

可耐135°C蒸煮,煮后仍然具有直撕裂性

温度适用范围广

在-30°C仍然具有直撕裂性

具有良好的透明度和光泽度



厚度/ μm	宽幅/mm	表面处理	耐蒸煮性	印刷性
15	300-2100	单/双面电晕	$\leq 135^{\circ}\text{C}$	≤ 12 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。



PHA is a specially BOPA film with the LISIM technology for blister battery casing applications. Its unique mechanical response to cold forming impact provides the casing foil with superior formability and robustness.



TAILORED MECHANICAL PROPERTIES FOR POUCH BATTERY CASING

Suitable for cold forming applications

HIGH PUNCTURE/IMPACT RESISTANCE

Good protectiveness for lithium battery



PRODUCT PARAMETERS

Thickness/ μm	Width/mm	Treatment
15-30	300-2100	single/both side corona



PHA是通过磁驱动线性电机同步双向拉伸技术生产，
为冷冲压锂电池封装铝塑膜设计的BOPA产品。

应用范围

锂电池封装专用包装



产品特性

力学上各向同性

使得该产品在冲压过程中在任何方向上
都不容易破裂或与铝箔脱离

高柔韧性、优异的抗穿刺、抗冲击性能

对内层铝箔和内容物有良好的保护作用



厚度/ μm	宽幅/mm	表面处理
15-30	300-2100	单/双面电晕



MATT is a 12/15 μm BOPA product with a build-in matte appearance on one side. The matte effect has no influence on the thermal or mechanical properties of the BOPA. It helps the customers to eliminate the use of additional processes, specialty films or chemicals which may not be fully applicable to food or hygiene products.



BUILD-IN MATTE APPEARANCE

Eliminate the need for additional processes – safer, more efficient, better scuff resistance...

EXCELLENT MECHANICAL PROPERTIES, PRINTABILITY AND GAS BARRIER

Single web of multiple functions – simplify the laminate structure



BOILING DOES NOT AFFECT THE MATTE APPEARANCE

Capable of retort applications



PRODUCT PARAMETERS

Thickness/ μm	Haze	Gloss	Width/mm	Treatment	Retortability	Printability
12-25	30-48	40-28	300-2100	Inner side corona	$\leq 121^{\circ}\text{C}$	≤ 9 colors

Notice: Retortability and printability are depending on customers' lamination and printing processing condition.



ULTRANY 优耐膜

MATT

MATT是一种既保留了普通BOPA膜的各种特性,又具有高雾度、低光泽的装饰性包装薄膜。

应用范围

要求具有哑光效果、奢侈感、朦胧美效果的高档包装,如具有消光效果的高档休闲食品包装袋、日化洗涤用品袋等。



产品特性

高雾度、低光泽

其用于包装产品上可以产生柔和的反光效果

使印刷图案更加逼真并且拥有良好的手感

显著提升包装档次

母料型消光薄膜

不会因摩擦、热封等加工条件而发生消光层的脱落、破损等问题

良好的阻氧性能

良好的拉伸性能、抗冲击、耐穿刺性能

水煮、蒸煮后仍然保持良好的消光效果



厚度/ μm	雾度/%	光泽度/%	宽幅/mm	表面处理	耐蒸煮性	印刷性
12-25	30-48	40-28	300-2100	内表面电晕	$\leq 121^{\circ}\text{C}$	≤ 9 色

备注:耐蒸煮性和印刷性与客户的加工工艺、复合结构、胶水油墨等有关。

