Hainan Shiner Industrial Co., Ltd.

Being a Dedicated Helper for Customer Innovation

Project *Products*

www.shinerinc.com

Company Profile

Since its establishment in 1988, Shiner has been dedicated to the research, development, production, and sales of functional BOPP films, coated films, and holographic anti-counterfeit films for 36 years.

We adhere to innovation-driven development and are committed to the research and application of eco-friendly materials, having become a leading one-stop supplier of global tobacco packaging materials. Our product line includes fully biodegradable films, functional water-based emulsions, and reclosable packaging for cigarettes, aiming to provide efficient and environmentally friendly packaging solutions for our clients.

R&D Innovation

Complete System Establishment

Our mission is to be a dedicated helper in our customers' innovation journey.

Edge Cutting Innovation

- 14th, 15th, 16th, and 18th "China Patent Award for Excellence"
- National Intellectual Property Demonstration Enterprise
- 7 national standards and 1 PVDC industry standard

5 System Certifications

- ISO9001 Quality Management System
- ISO14001 Environmental Management System
- ISO22000 Food Safety Management System
- Intellectual Property Management System
- OHSAS18001Occupational Health and Safety Management System

R&D Strength

- National Functional Film Technology National-Local Joint Engineering Research Center
  National CNAS Laboratory Recognition
- National Postdoctoral Research Station

National Recognition

- National Key "Little Giant" Enterprise for Specialization and Innovation
- Recognized As A High-Tech Enterprise In Hainan Province For the 4th Time.
- National Innovative Enterprise
- Provincial-level Private Research Institute

Market Coverage

15%

Tobacco Film Series Products Market Share in China

15%

Barrier Coated Film Market Share in China

10+ Domestic Tobacco Clients

Shanghai Tobacco; Henan China Tobacco; Hainan Hongta; Hunan China Tobacco; Guizhou China Tobacco; Hubei China Tobacco; Anhui China Tobacco; Jilin Tobacco

15+ International Clients

Australia, Vietnam, the Philippines, the United Arab Emirates, New Zealand, Israel, Laos, Cambodia, Japan, Germany, Italy, Spain, Turkey, Russia, South Africa, Chile， etc。

70%

Market Share in Vietnam

100%

Anti-counterfeit Film Market Share in China

Industry Upgrade

Highlights of Industrial UpgradingFactory Buildings & Equipment

12000㎡ Integrated R&D building

7000㎡ Small-scale and medium-scale pilot test workshops

40 million RMB worth of high-end professional testing and experimental equipment imported from the United States, Japan, Germany, Italy, and other countries.

Industry Upgrade

Highlights of Industrial UpgradingTechnology & Talent

Traditional functional films upgraded to biodegradable materials: The research focuses on the development of polylactic acid (PLA) for agricultural use, biaxially oriented PLA, modification of PLA, water-based functional materials, and functional films. Especially after the industrialization of the biodegradable tobacco film product, it can achieve a complete replacement of 100,000 tons in the entire tobacco film industry, with a market size of about $6 billion USD.

> Technical Upgrade of New Materials for Tobacco Use:
> Including the development of environmentally friendly tobacco auxiliary materials such as tobacco resealable packaging, eco-friendly inner liner , and structural color tipping paper.

Platform Upgrade

The commissioning of the MOLY Innovation Workshop provides a more comprehensive scientific research platform for Shiner

Technology Service Team

Equipped with a professional technology service team, we offer comprehensive technology services to enterprises

Industry-Academia-Research Resources

We have fully shared resources with universities such as Beijing Technology and Business University, Sichuan University, Dalian University of Technology, and Hainan University, including access to experts, professors, and equipment.

Technical Talent Upgrade

We have established a comprehensive professional team of 123 members, including 36 with postgraduate degrees or above and 4 with senior professional titles, all possessing exquisite technical skills and rich experience.

Our Achievement Transformation

We are currently focusing on developing and introducing more environmentally friendly and valuable production technologies, and we are committed to providing better product packaging solutions with lightweight and low carbon emissions for industries such as tobacco, food, and daily chemicals.

More than 80% of these technologies have been industrialized, achieving good economic and social benefits, which have effectively promoted the development of the company.

Project :

70+	national, provincial, municipal, and enterprise-level scientific and technological projects
70+	honors at various levels, including national, industry, and provincial awards
218	filed 218 patents and obtained 126 valid authorizations,
80%+	over 80% of these patents already industrialized and achieving significant economic and social benefits

5 Major Product Series

Traditional Tobacco Films

Biaxially Stretched Film Research and Testing
BOPP Shrink Film;
Positioning Printing Film;
Tobacco-Use coated Film;
Easy-Tear Functional Film

01

Tobacco-Specific Materials

Resealable Packaging
Environmental inner liner
Inkless Printing

02

PLA Development and Application

PLA Film; PLA Tow
PLA Filter

03

Water-Based Materials

Environmental
Emulsions

04

Environmental Accessories

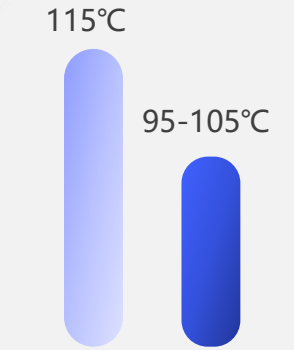
Biodegradability
Rapid Detection
Instrument

05

01. Biaxially Stretched Film Research and Testing

BOPP Tobacco Film

We have the capabilities for research and development, testing and analysis, and verification of small, medium, and large-scale trials for bi-directionally stretched functional films.
Our main products : BOPP shrink film, laser holographic anti-counterfeit film; coated film; positioning printing film, etc. We possess globally leading patented technologies and one-stop production and packaging capabilities for plastic films.



sealing temperature · decrease

Fast

Adapting to high-speed packaging machines with a capacity of over 600 packs per minute, the sealing temperature is reduced from 115℃ to 95-105℃, ensuring the heat sealing performance during the high-speed packaging process.

product thickness · thinner

Thin

Our Film’ s thickness is reduced to 18 microns, and the elastic modulus is increased from 2500MPa to above 2700MPa, achieving thinness while maintaining high stiffness, ensuring high performance during the packaging process.

haze · low

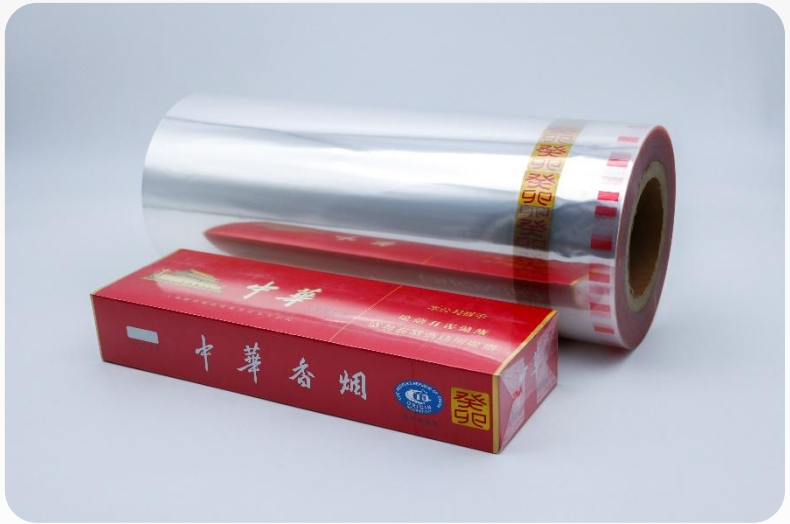
Lucidity

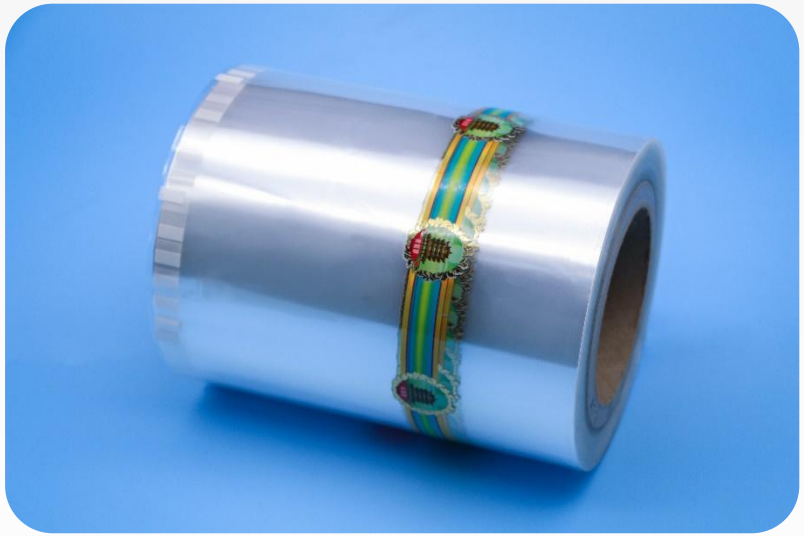
The film has high transparency with a haze of less than 1.0, enhancing the aesthetics of the packaging and the display effect of the product.

01.Biaxially Stretched Film Research and Testing

Positioning Printing Film

- Our Innovative Development: Color Positioning Printing Film
- Function: Enhance display effect, increase product aesthetics and applicability.



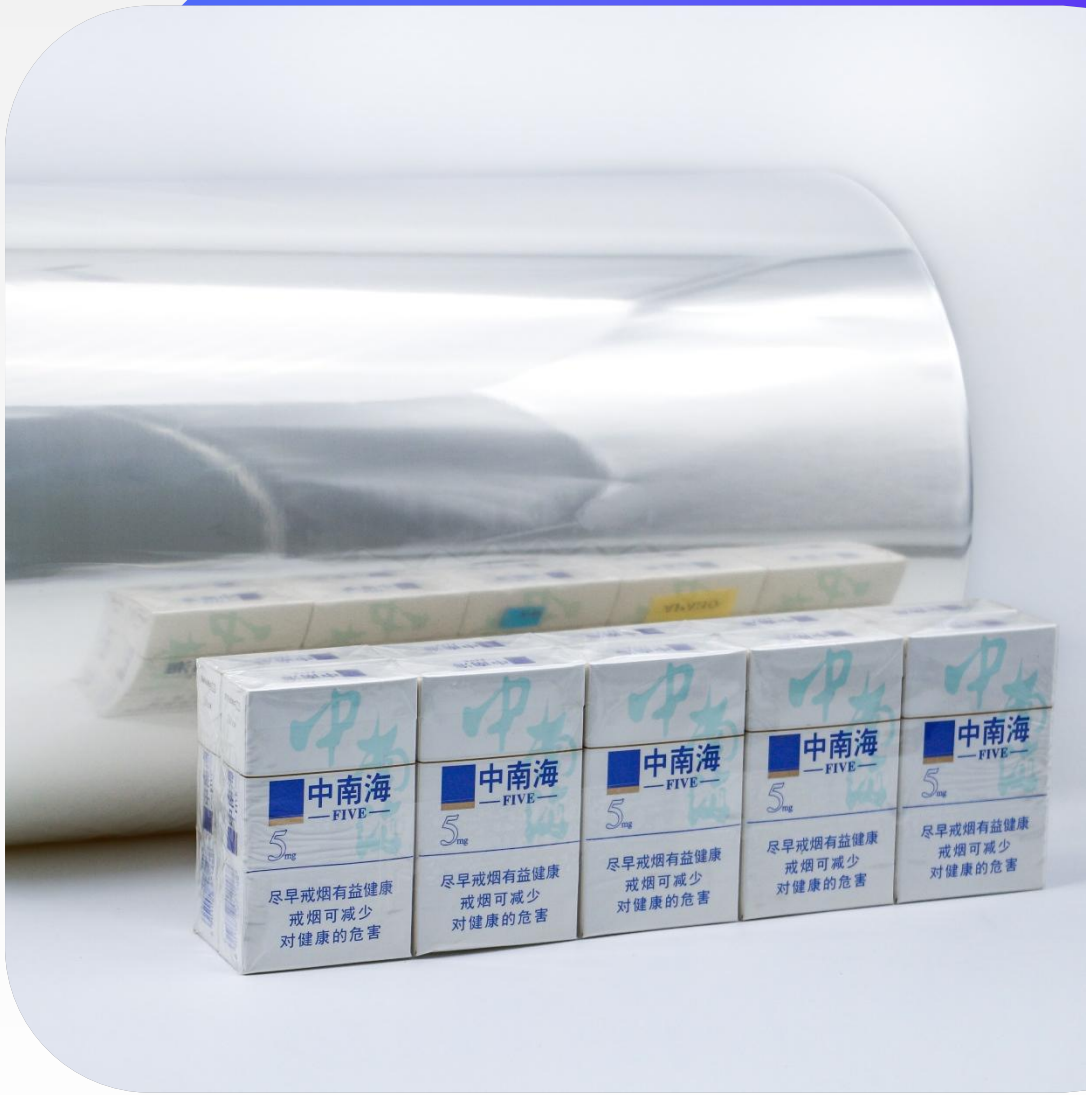


Tobacco-Use Coated Film

To meet customers' cost reduction needs, our company has developed a low-temperature coated film, which can reduce the use of paper carton products and lower production costs.

· A coating film with BOPP as the base material and both sides coated with acrylic, showing excellent adaptability on all packaging machines.

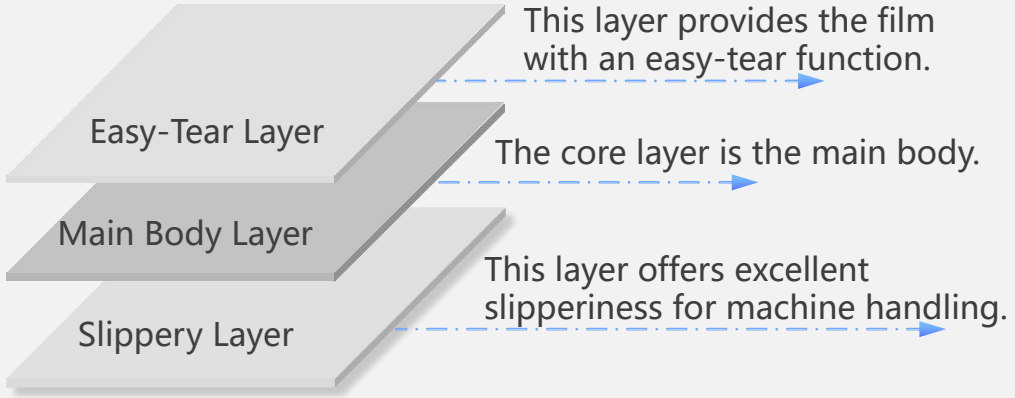
· Excellent transparency
· Good aroma barrier (retention) performance
· A wide range of heat sealing temperatures
· High heat sealing strength at 127℃ and a low starting sealing temperature of 81℃
· Good printability on both sides



Easy-Tear Functional Film

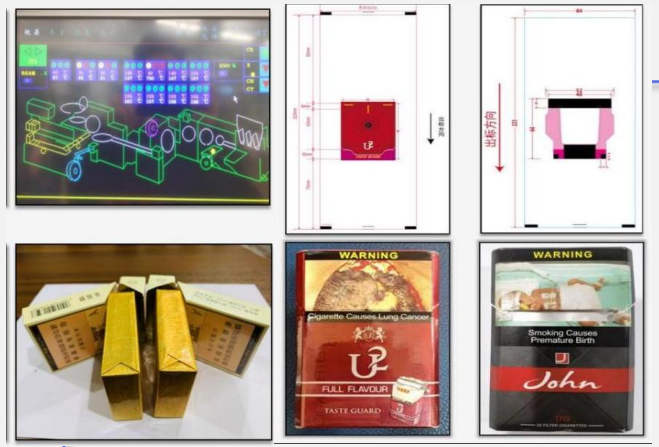
- Full-directional easy tearing capability
- Excellent slipperiness
- Barrier properties against moisture, oxygen, and aroma
- low-temperature heat sealing performance, wide sealing range, and high sealing strength
- Good printability

Three-layer Coextruded Polypropylene Film Structure

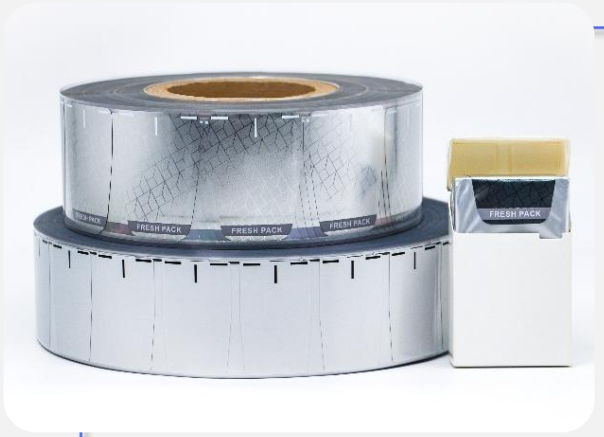


Resealable Packaging Materials

Our main customers include Hubei China Tobacco, Fujian China Tobacco, Hunan China Tobacco, Jilin Tobacco, Laos International, DTM Group,etc.



It is suitable for automated cigarette packaging machines. During the repeated sealing process, the combination of an auto-sealable inner lining and pressure-sensitive labels works together to provide the cigarette packaging with functions such as moisture retention, aroma preservation, oxygen barrier, and moisture barrier.



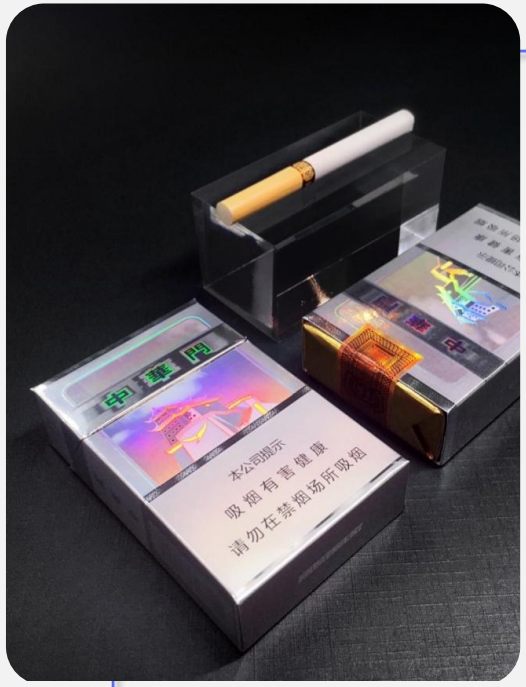
- Developed independently by Shiner with high cost-performance ratio.
- Tailored for the modern tobacco industry, allowing your creativity to shine with minimal trial and error costs.
- The product is suitable for various climates, including both dry and humid regions.

- Customized appearance, stylish and trendy, adding a crown to your cigarettes.
- Maintains moisture and aroma, locking in the original flavor of the cigarettes.
- Advanced forming technology and unique adhesive surface control technology ensure the product remains effective after 50 openings and closings.

Environmental Innerliners &Inkless Printing

Environmental Innerliners

eco-friendly, aluminum-free innerliner paper, utilizing nanocoating technology, fully biodegradable, and comparable in barrier and aroma preservation functions to existing composite innerliner papers. The center also offers moisture-retaining aluminum foil paper and eco-friendly labels.



Cigarette branding paper

It is inkless printed branding paper, which utilizes micro-nanotechnology. It is eco-friendly, degradable, and helps in energy saving and reduction of consumption. This product minimizes environmental impact and lowers operational costs for businesses.

BOPLA Tobacco Film

A technological breakthrough in the water resistance of polylactic acid.
A high-quality, eco-friendly alternative to traditional non-degradable films, meeting your environmental needs.

· The raw material is bio-based and fully biodegradable, low-carbon, and environmentally friendly.
· It offers high transparency, low haze, good surface gloss, and excellent printability.

· It has good heat shrinkage properties, allowing the film to achieve a tight fit after packaging cigarettes.
· It has excellent mechanical properties, with a tensile strength much higher than that of ordinary biodegradable films and close to traditional BOPP films.

· It has excellent processing properties, with good stability in folding form and twist retention.
· It has good heat slipperiness.
· It has low-temperature heat-sealing performance with a wide range of heat-sealing temperatures.

PLA Tow & Filter

PLA tow and filter rod are ideal substitutes for cellulose acetate filter materials.
The raw material and production cost of polylactic acid fibers are lower than that of cellulose acetate fibers, offering a price advantage.

· Abundant resources: The raw material for PLA comes from rich renewable plant resources.

· Outstanding environmental protection: Polylactic acid fibers are biodegradable and do not cause pollution.

· Strong adsorption: The structure of polylactic acid fibers is similar to that of cellulose acetate fibers. Its filtration performance is comparable to that of cellulose acetate fibers and superior to that of polypropylene fibers.

· Safe and reliable: It is safe and harmless to humans.

Development and application of water-based new materials

The main products include water-based environmentally friendly emulsions, which consist of water-based eco-friendly adhesives for cigarettes and water-based eco-friendly coating emulsions. The water-based eco-friendly adhesives include 3 types: overlap adhesive, packaging adhesive, and filter tip adhesive, which can be used for existing high, medium, and low-speed cigarette packaging machines.

The water-based eco-friendly coating emulsions include 2 types: PVOH emulsion and acrylic emulsion. This series is a product of independent technology patent, completely water-based, with an environmentally friendly production process and no residual organic solvents.

- The water vapor transmission rate is less than 300 g/m²·day before embossing and between 500-800 g/m²·day after embossing.

- Solving machine adaptability to enable mass production;
- Hygiene indicators such as the 24 solvent residues meet the requirements of the national tobacco industry.

05.Environmental Accessories

Biodegradation rapid testing instrument

Based on the principle of near-infrared spectral absorption, the product is portable, fast, and has a high accuracy rate. The main function of the product is to detect whether plastic products contain non-biodegradable components, such as PE, PP, PS, PET, PVC, EVA, and other non-biodegradable components explicitly mentioned in the banned plastic list.

01

The product was developed based on the standard of "Portable Near-Infrared Plastic Rapid Detector (THNPIA 03—2022)".

02

The product has been awarded the "First Set" achievement appraisal for advanced equipment in Hainan Province in 2022, and also won the Excellence Award at the 2022 First Hainan International Design Competition. It has applied for 17 related technology patents.

03

Since its launch, the product has been purchased and used by market supervision departments or testing institutions in Hainan, Anhui, Zhejiang, Shenzhen, and other regions.

SN Shiner Industrial

Since 1988

Thanks.

November 2024