

## **PET FILMS**

BOPET (Biaxially Oriented Polyethylene Terephthalate) film has excellent physical properties and is used for a wide variety of products.

BOPET film represent the second largest segment (by volume) in the biaxially oriented film market. BOPET is used as plain, co-extruded, or quite often inline coated, treated, clear, pigmented or matte film in:

- Packaging
- Industrial and special applications
- Electrical
- Imaging
- Decoration

Characteristics and applications

Polyester Film Features and Benefits:

Biaxially oriented PET film (BOPET) is used successfully in a wide range of applications, due to its excellent combination of optical, physical, mechanical, thermal, and chemical properties, as well as its unique versatility.

Optically brilliant, clear appearance  
Unequaled mechanical strength and toughness  
Excellent dielectric properties  
Good flatness and coefficient of friction (COF)  
Tear-resistant and puncture-resistant characteristics  
Wide range of thicknesses-as thin as 1 micron up to 350 micron  
Excellent dimensional stability over a wide range of temperatures  
Very good resistance to most common solvents, moisture, oil, and grease  
Excellent barrier against a wide range of gases

Applications:

Packaging

BOPET's appeal for packaging applications is its thermal stability; chemical resistance; oxygen and water barrier (with surface coating); clarity; shrinkability; good adhesion for coatings, inks, and metals; and its sealability. The material is ideal for stand-up pouches, lids, peelable seals, microwavable food packaging, metallized high barrier packaging, can lamination, labels, gift wrapping and holographic packaging.

Industrial

In industry, BOPET is applied as a glass protection layer, sheet metal protection, adhesive tapes and films, sails, thermal insulation, emergency blankets, X-ray films, and visual and telescopic solar filters. BOPET

has high thermal and moisture dimensional stability, broad light transmission, high tensile strength, and chemical resistance.

#### Electrical

Because of its dimensional stability, high dielectric constant, and coefficient of friction, BOPET film (either by itself or laminated with other materials) is ideal for many electrical applications such as capacitors, motor insulation, cable and wire barriers, conductor wrapping, insulation for solar panels, functional layers in LCD displays, loudspeaker diaphragms, and base material for flexible PC boards.

#### Graphic design

The excellent optical and surface properties, non-aging qualities, and long shelf life make BOPET the preferred material for applications such as decorative panels, backlights, roll signs, microfilms, drafting/reprographics, plots and drawings, map overlays, and laminates.

#### Decoration

Due to its clarity, transparency, and thermal stability, BOPET is used for decoration or numbering on textiles, papers and plastics through hot stamping and thermo transfer processes. BOPET is also used for metallized and/or coated decorative yarns and confetti.

#### TRANSPARENT CORONA TREATED

The corona treated surface provides excellent adhesion to printing inks and laminating adhesives. Coatings has direct adhesion to the PET surface. It is suggested for general packaging applications.

Thicknesses options from 8 to 50 microns

#### TRANSPARENT CHEMICALLY TREATED

- Copolymer coating
- Acrylic coating
- Special coating for Hot Filling Applications

These are transparent biaxially oriented polyester (BOPET) films with one side chemically coated to give excellent adhesion to wide range of inks and lamination adhesives. It has a very high and stable wetting tension level for extended time periods due to chemical coating.

## TRANSPARENT COEXTRUDED

These are Biaxially Oriented Transparent Polyester Films with functionally modified Co-ex layer on one side. The modified layer has excellent compatibility with most inks, adhesives, release coatings, primers, etc, and also ensures high metal bond strength after metallization.

Gauges options from 12 to 30 microns

## TRANSPARENT COATED

- PVDC coating

## METALLIZED

- Metallized over corona film
- Metallized over Chemically treated surface
- Metallized over Coextruded surface
- Regular and High Barrier films
- High Bond Metallized

Biaxially Oriented Vacuum Metallized Polyester Film has excellent barrier and high gloss properties. The base film used can have different options to enhance metal adhesion to the film.

Gauges options from 8 to 50 microns

## SPECIALTIES

- White PET
- Matte Finish
- Amber Color
- Gold Color
- Plain Film
- "Brush" Finish Metallized
- Half Metallized
- Matte Finish Metallized
- Isotropic
- Isotropic Metallized
- Cable grade
- Twist grade
- Metallized Twist
- Holographic
- Heat Sealable grade

## Example products

