Plastic Film

US Industry Study with Forecasts for 2016 & 2021

Study #2955 | December 2012 | $5100 | 370 pages
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US demand to reach 15.9 billion pounds in 2016

Demand for plastic film in the US is projected to grow 1.8 percent annually to 15.9 billion pounds in 2016. Advances will reflect the performance and source reduction advantages of plastic film over other packaging materials and opportunities in film products such as pouches for drugs and medical products, and in modified atmosphere packaging for food. Demand will also benefit from film’s use in manufacturing, shipping, and building construction.

LLDPE to remain top film

Linear low density polyethylene (LLDPE) will remain the leading film, and is forecast to increase 2.1 percent yearly to 7.5 billion pounds in 2016. This will result from the film’s versatility and from opportunities in areas such as produce and snack packaging, stretch and shrink wrap, and trash bags. Consumption of low density polyethylene film will rebound from the declines of the 2001-2011 period, benefiting from opportunities in shrink wrap, shipping sacks, and nonwoven disposables. High density polyethylene film demand will grow at a below average pace as a result of slow retail bag advances. Polypropylene film demand will expand 2.2 percent annually to 1.6 billion pounds in 2016, driven by produce, grain mill, dairy product, and other food packaging applications. Polyethylene terephthalate (PET) film demand will increase at a below average rate. Good opportunities are anticipated for PET film in food packaging applications such as snack foods, confections, and frozen food, due to the need for higher barrier properties. However, this will be offset as remaining applications in photographic film and magnetic tape are lost to digital technologies. Polyvinyl chloride film demand will decline based on a slight drop in red meat consumption, consumer health and environmental concerns regarding PVC and plasticizer migration, and competition from polyethylene and polypropylene films.

Nonpackaging to be fastest growing application

Packaging accounted for nearly three-fourths of all plastic film use in 2011 due to cost, convenience, and source reduction advantages over other materials. However, the most rapid growth is anticipated in nonpackaging applications due to opportunities in areas such as nonwoven disposables, agricultural film, and film used in building construction. Food packaging will grow at an above average pace, driven by continued expansion in the beverage, confections, and dairy segments. Demand for film in nonfood packaging will be driven by drug and medical product applications. Growth is anticipated in secondary packaging due to opportunities in areas such as stretch and shrink wrap, although this growth will be constrained by below average growth in retail bags.
RESINS

Polypropylene

Demand for polypropylene film is projected to grow from 1.1 billion pounds in 2006 to 1.6 billion pounds in 2016, accounting for 10 percent of total plastic film demand. Advances will reflect polypropylene’s performance characteristics such as heat sealability, good gas barrier properties, and excellent optical properties (low haze and high gloss). Other stimulants include a revival of consumer spending and the need for lower cost yet higher performing materials to replace other packaging materials. Food packaging will remain the largest market, with demand expected in smaller volume shipping sack and shrink wrap uses. Metallized OPP film demand is projected to increase from 201 million pounds in 2006 to 215 million pounds in 2016, accounting for 13 percent of total polypropylene film demand. OPP is widely used in the packaging of products such as baked goods, snacks, confections, and frozen foods due to its good clarity and impact strength. Other packaging uses include the shrink wrapping of toys, games, hardware, and cigarettes.

Metallized OPP film, although more expensive than competitive materials, weighs less than foil and has better oxygen and moisture barrier properties, and is more puncture resistant than clear films. Metallized OPP film can replace foil and sealant layers in flexible packaging composed of paper and polyethylene structures. Biaxially oriented polypropylene (BOPP) films compete with foil and metallized OPP. When polypropylene film is biaxially oriented, it becomes crystal clear and provides an excellent packaging material for retail products. BOPP is formed by stretching polypropylene film in two directions, improving clarity and stiffness. Due to its gloss, sparkle, clarity, and other properties, BOPP competes with traditionally used materials such as paper, aluminum foil, and cellophane.

<table>
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<th>2001</th>
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<th>2011</th>
<th>2016</th>
<th>2021</th>
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<td>Snack Food Shipments (bil 2005$) lb film/000$ snack food</td>
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<td>14.3</td>
<td>15.0</td>
<td>16.1</td>
<td>17.4</td>
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<td>Snack Food Film Demand Polypropylene</td>
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<td>135</td>
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<tr>
<td>Polyethylene Terephthalate</td>
<td>109</td>
<td>95</td>
<td>97</td>
<td>102</td>
<td>113</td>
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<tr>
<td>Other</td>
<td>36</td>
<td>45</td>
<td>56</td>
<td>62</td>
<td>68</td>
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<tr>
<td>% snack food</td>
<td>21.2</td>
<td>22.9</td>
<td>24.9</td>
<td>25.3</td>
<td>25.6</td>
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<tr>
<td>Food &amp; Bev Packaging Film Demand</td>
<td>3548</td>
<td>4028</td>
<td>4448</td>
<td>4900</td>
<td>5240</td>
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**Sample Text**

**Table V-4**

**SNACK FOOD FILM DEMAND BY RESIN**

(million pounds)

**Chart IX-1**

**US PLASTIC FILM MARKET SHARE, 2011**

($20.6 billion)
COMPANY PROFILES

Hilex Poly Company LLC
101 East Carolina Avenue
Hartsville, SC 29550
843-857-4800
http://www.hilexpoly.com

Annual Sales: $5100
Employment: 370 Pages

Key Products: retail, grocery, and other bags; agricultural films; and trunk liners

Hilex Poly is a producer of plastic bags and films. The Company is privately held. In November 2012, Hilex Poly was acquired by private equity firm Wind Point Partners (Chicago, Illinois) from an affiliate of investment firm TPG Capital.

The Company is active in the US plastic film industry through the production of retail, grocery, and other bags; agricultural films; and trunk liners. These products are made primarily from high density polyethylene. Bags are marketed under such brand names as ROLLMATE, QUIKSTAR, QUIKMATE EZ, QUIKTAB, QUIKSERV, RHINO BAG, and HED. Hilex Poly is the largest manufacturer of plastic retail bags in the US, according to Wind Point Partners. The Company produces more than 30 billion bags annually for a variety of customers, including Wal-Mart Stores Incorporated (Bentonville, Arkansas) and the Kmart Holding Corporation subsidiary of Sears Holdings Corporation (Hoffman Estates, Illinois).

ROLLMATE bags feature t-shirt handles and are available in rolls of up to 500 bags. These bags are used in Hilex Poly’s ROLLMATE bagging systems, which are employed mainly in retail applications and

TABLE VI-3

<table>
<thead>
<tr>
<th>Item</th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
<th>2016</th>
<th>2021</th>
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<td>Medical Products Shipments (bil 2005$)</td>
<td>290.2</td>
<td>351.1</td>
<td>377.6</td>
<td>435.8</td>
<td>514.0</td>
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<td>lb film/000$ medical</td>
<td>1.20</td>
<td>1.17</td>
<td>1.24</td>
<td>1.23</td>
<td>1.20</td>
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<td>Medical Product Film Demand</td>
<td>347</td>
<td>411</td>
<td>470</td>
<td>536</td>
<td>615</td>
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<td>Linear Low Density Polyethylene</td>
<td>95</td>
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<td>105</td>
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<td>28</td>
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<td>Nylon</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>13</td>
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<tr>
<td>% drugs &amp; medical</td>
<td>20.3</td>
<td>21.7</td>
<td>23.3</td>
<td>24.1</td>
<td>25.3</td>
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<tr>
<td>Nonfood Packaging Film Demand</td>
<td>1708</td>
<td>1893</td>
<td>2020</td>
<td>2225</td>
<td>2430</td>
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</tbody>
</table>

“Demand for plastic film packaging in drugs and medical products is projected to increase 2.7 percent per year to 536 million pounds in 2016. Advances for plastic film will be based on growth in medical product output along with improvements in barrier strength and moisture resistance. In pharmaceutical packaging, plastic films are often used in pouches that primarily serve unit dose applications. These containers are the leading packages for topical and powder based drugs dispensed in hospitals and nursing homes. In applications involving institutional medication, pouches offer both ...”

--Section VI, pg. 204
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Page 7
OTHER STUDIES

World Protective Packaging

World demand for protective packaging will rise 6.3 percent annually to $24.5 billion in 2016. Foamed plastics will remain the largest segment but will lose market share to bioplastic and nonplastic products such as molded pulp and bamboo. Developing regions will see the fastest advances in demand. This study analyzes the $18 billion world protective packaging industry, with forecasts for 2016 and 2021 by product, material, function, market, world region and for 24 major countries. The study also evaluates company market share and profiles industry participants.  
#2943 - September 2012 - $6100

Pouches

Demand for pouches in the US is projected to increase 5.1 percent per year to $8.8 billion in 2016. Gains will be driven by faster growth for stand-up pouches stemming from sustainability, functional, and marketing advantages over alternative packaging media. The nonfood market will slightly outpace the dominant food market. This study analyzes the $6.9 billion US market for pouches, with forecasts for 2016 and 2021 by type, market, feature and production method. The study also evaluates company market share and profiles industry players. 
#2899 - July 2012 - $4900

World Pressure Sensitive Tapes

Global demand for pressure sensitive adhesive (PSA) tapes is projected to rise 5.6 percent per year through 2016 to 45.5 billion square meters. The best gains are expected for polypropylene products and value added specialty tapes including foam and fiberglass types. This study analyzes the 33.1 billion square meter world PSA tape industry, with forecasts for 2016 and 2021 by tape type, backing material, world region and for 22 major countries. The study also evaluates company market share and profiles industry competitors. 
#2883 - May 2012 - $6100

Stretch & Shrink Film

US demand for stretch and shrink film is forecast to rise 3.3 percent annually to $2.4 billion in 2015. Stretch film will remain the dominant segment, with stretch hoods growing the fastest. Shrink film demand growth will outpace gains in stretch film based on its high clarity and excellent print capabilities, greatly enhancing product marketability. This study analyzes the $2.0 billion US stretch and shrink film industry, with forecasts for 2015 and 2020 by type, market, application and resin. The study also evaluates company market share and profiles industry players. 
#2830 - December 2011 - $4800

World Labels

World demand for labels will rise 5.2 percent annually through 2015. Pressure sensitive labels will remain the largest type and continue to supplant glue-applied labels. The Asia/Pacific region will grow the fastest and remain the largest market, due to its large manufacturing industries. This study analyzes the 40.1 billion square meter world label industry, with forecasts for 2015 and 2020 by application method, material, printing technology, market, world region and for 19 countries. The study also evaluates company market share and profiles industry participants. 
#2808 - October 2011 - $6100

About The Freedonia Group

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

- Chemicals
- Plastics
- Life Sciences
- Packaging
- Building Materials
- Security & Electronics
- Industrial Components & Equipment
- Automotive & Transportation Equipment
- Household Goods
- Energy/Power Equipment

Freedonia Custom Research

Freedonia Custom Research delivers the same high quality, thorough and unbiased assessment of an industry or market as an industry study. Since the research initiative is based upon a company’s specific needs, companies harness Freedonia’s research capabilities and resources to answer unique questions. When you leverage the results of a Freedonia Custom Research engagement, you are able to obtain important answers to specific questions and issues associated with: mergers and acquisitions, new product launches/development, geographic expansion, entry into new markets, strategic business planning, and investment and funding decisions.

Freedonia Custom Research is ideal for companies seeking to make a strategic difference in the status quo and focus on future business growth. Working side by side with clients, Freedonia’s team is able to define a research project that is custom-tailored to answer specific questions and provide the basis from which a company can make informed business decisions.