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## INDUSTRY OVERVIEW

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*This section contains information and statistics relating to the industries that we operate in and certain related industry sectors. The information in the section below has been derived, in part, from various official government publications. We believe that the sources of those information are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information has not been independently verified by us, the Sole Global Coordinator, the Sole Sponsor, the Underwriters, any of their respective directors, employees and personnel or any other person or party involved in the Global Offering and no representation is given as to its accuracy.*

### SOURCES OF INFORMATION

#### **Freedonia**

Freedonia Custom Research, Inc (“**Freedonia**”) is a leading business research company that publishes industry research studies. Their industry analysis provides an outlook and an assessment of an industry and includes product and market forecasts, industry trends, threats and opportunities, competitive strategies, market share determinations and company profiles.

We commissioned Freedonia to conduct a market analysis of, and produce a report (the “**Freedonia Report**”) that covers the disposable plastic medical consumables and degradable retail plastic bag markets in the United States, United Kingdom, European Union (except United Kingdom) (the “**Rest of EU**”) and China (the “**Research Scope**”). The Freedonia Report represents data, research opinion or viewpoints developed independently on its behalf and does not constitute a specific guide to action. In preparing the Freedonia Report, Freedonia used various sources, including company financial filings; government statistical reports; press releases; industry magazines; and interviews with employees of manufacturers of related products (including client), manufacturers of competitive products, distributors of related products, and government and trade associations. Growth rates shown in the Freedonia Report are based on many variables, such as currency exchange rates, raw material costs and pricing of competitive products, and such variables are subject to wide fluctuations over time. The Freedonia Report speaks as of its original publication date (and not as of the date of this prospectus), and the opinions and forecasts expressed in the Freedonia Report are subject to change without notice. The fee payable to Freedonia for the preparation of the Freedonia Report is US\$54,000. The payment of such amount was not contingent upon our successful listing or on the results of the Freedonia Report. Besides the Freedonia Report, we did not commission any other customized report in connection with the preparation of the industry data used in this prospectus.

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Freedonia conducted primary and secondary research in order to gather data for analysis in the Freedonia Report. Secondary sources includes, but were not limited to:

- Freedonia consensus economic forecasts
- Freedonia industry studies, such as biodegradable plastics, world bioplastics and disposable medical supplies
- Industry and trade publications/associations
- Local and national press
- Marketing literature and press releases from competitors
- Investment analyst presentations

In preparation for primary research interviews, guides were developed and employed for discussions across industry constituent groups. Primary research was aimed at challenging and validating assumptions developed during the course of the study.

### INTRODUCTION OF DEGRADABLE POLYMERS

Owing to the extraordinary range of properties accessible in polymeric materials, polymer plays an essential and ubiquitous role in everyday life. For example, plastic is one of the polymeric materials that has the characteristics of strong, durable, versatile, lightweight, safe and inexpensive and it is widely used nowadays. However, increasing concern is put on the environmental impact of plastic as it cannot be degraded for decades and will become the waste to the environment after use. Thus, degradable polymers have been developed and become increasingly popular in recent decades to meet the changing public attitude and concern.

According to a study commissioned by The Department of the Environmental and Heritage on behalf of the Environment Protection and Heritage Council of Australia and New Zealand in 2003, degradable polymers can be classified into two ways based on the methodology by which they degrade and the materials from which they are manufactured:

1. Degradable polymers are polymers that are able to degrade in different ways and in different environments. According to the way they degrade, degradable polymers can be classified into the following types:
  - **Biodegradable polymers** — polymer capable of undergoing decomposition into carbon dioxide, methane, water, inorganic compounds or biomass. The enzymatic action of microorganisms plays a predominant role in the decomposition and can be measured by standardized tests, in a specified time, reflecting available disposal conditions;

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- **Compostable polymers** — polymer degradable under composting conditions. The polymers must break down under the action of microorganisms, achieve total mineralization and the mineralization rate must be high and compatible with the composting process;
  - **Oxo-biodegradable polymers** — polymer degradable through the incorporation of additives which trigger and accelerate the degradation process. Its degradation is initiated by natural daylight, heat and/or mechanical stress, embrittled in the environment and eroded under the influence of weathering. The length of time it takes for oxo-biodegradable products to degrade can be “programmed” at the time of manufacture and can be as little as a few months or as much as a few years. They are protected from degradation by special antioxidants until ready for use, and storage-life will be extended if the products are kept in cool, dark conditions;
  - **Photodegradable polymers** — polymer degradable through the action of ultraviolet (“UV”) light as it weakens the chemical bond or link in the polymer or chemical structure of the plastic. UV-sensitive additives may be added in the polymer to accelerate the degradation process; and
  - **Water-soluble polymers** — polymer dissoluble in water within a designated temperature range and then biodegrade in contact with microorganisms.
2. Composition of degradable polymers also vary, with the main categories being:
- **Starch-based polymers** — polymers made with at least 90% starch from renewable resources such as potato, corn, tapioca or wheat;
  - **Polyesters** — polymers manufactured from hydrocarbons (oil or gas). All polyesters degrade eventually, with degradation rates ranging from weeks for aliphatic polyesters to decades for aromatic polyesters; and
  - **Starch-polyester blends** — polymers that mix thermoplastic starch with polyesters made from hydrocarbons.

### MAJOR END-USES

Applications for degradable plastics can be loosely placed into two categories — packaging and non-packaging. Packaging markets for degradable plastics include packaging film, loose-fill materials, containers and other molded packaging products. Non-packaging uses for degradable plastics encompass bags, foodservice disposables, automotive parts, electronics, agricultural films and others. A wide variety of degradable plastics can be used in the manufacture of packaging film, including polylactic acid, starch-based resins, polyhydroxyalkanoates (PHAs) and cellophane. Degradable loose-fill packaging is made from starch-based plastics, which are typically rendered from corn or wheat.

Degradable plastic bags include yard/garden, kitchen/refuse, retail and grocery, industrial liner, chemical handling and infectious/soiled laundry types. Applications for degradable plastics in foodservice disposables include cutlery, plates, trays, dishes, bowls and cups, which are widely used in fast-food and other dining outlets, as well as in the home. In the agricultural sector, biodegradable plastics are used to make mulch films and daily landfill covers.

Other, smaller volume applications for degradable plastics include textiles (eg, bedding, apparel, carpet and nonwovens), disposable razor handles, foams for arts and crafts products, plant and seed coatings, and growing containers for plants.

### DEGRADABLE RETAIL PLASTIC BAG MARKET

Degradable plastic bags have been promoted as a means of reducing the environmental impacts of plastic bag litter. While their widespread adoption would not reduce the number of bags in use, it is believed that degradable bags would last for a shorter time in the environment if littered, and thus have a lower adverse environmental impact.

Generally speaking, the key demand drivers for the degradable retail plastic bags include:

- The “green movement” — companies and cities are looking to gain positive exposure and/or be environmentally friendly, which has resulted in the adoption of degradable plastic bags;
- Non-degradable plastic bag bans, taxes and reduction efforts; and
- Sufficient composting infrastructure — with a sufficient composting infrastructure in place, there is demand for products (e.g. hydro-degradable bags) to utilize the facilities.

According to Freedonia, among the regions in the Research Scope, Rest of EU led degradable retail plastic bag demand in 2009 with a 61% market share in terms of units, followed by the UK (29%), US (7%) and China (3%). Degradable plastic bags are either hydro-biodegradable/compostable (i.e., starch-based and other products that meet specific

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degradability standards for compostability) or oxo-biodegradable (i.e., traditional resin-based with a prodegradant additive), with oxo-biodegradable accounting for approximately three-fourths of the world market.

### Degradable retail plastic bag demand by region (million units)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	CAGR	CAGR
	(A)	(A)	(A)	(A)	(A)	(A)	(F)	(F)	(F)	(F)	(F)	09/04	14/09
Degradable retail													
plastic bags	4,680	5,630	8,070	11,930	12,240	11,410	11,390	11,330	11,990	12,910	14,420	20%	5%
— United States	113	226	414	655	711	795	1,053	1,244	1,474	1,740	2,052	48%	21%
— United Kingdom	926	1,489	3,200	5,452	4,347	3,263	2,834	2,019	1,747	1,617	1,556	29%	-14%
— Rest of EU	3,596	3,846	4,348	5,665	6,911	7,005	7,087	7,572	8,171	8,859	9,995	14%	7%
— China	44	69	109	158	271	348	415	495	598	694	816	51%	19%

(A) actual figures; (F) forecast figures.

*Source:* Freedonia Custom Research, Inc.

As shown in the table above, degradable retail plastic bag demand in the United States is limited due to the lower penetration of degradable plastic bags in the United States retail market relative to the United Kingdom and Rest of EU, resulting from the lack of widespread composting infrastructure and belated adoption of plastic bag regulations/policy. However, from 2004 to 2007, degradable retail plastic bag adoption rose quickly in the United States since more retailers and cities were looking for ways to be more environmentally friendly as consumer environmental awareness increased. The CAGR of degradable retail plastic bag demand by United States in terms of units from 2004 to 2009 was 48%. It is expected that the demand for degradable retail plastic bag in United States will continue to grow at CAGR of 21% from 2009 to 2014 as retailers and cities continue to strive to become more environmentally friendly.

The United Kingdom is the second largest consumer of degradable retail plastic bags of the regions in the Research Scope, accounting for 29% of unit-based demand in 2009. From 2004 to 2007, degradable retail plastic bag adoption rose rapidly in the United Kingdom. Retailers, especially supermarkets, began to utilize the bags in an attempt to be more environmentally friendly. The CAGR of degradable retail plastic bag demand by the United Kingdom in terms of units from 2004 to 2009 was 29%. However, demand is expected to decrease from 2009 to 2014 as retailers reduce plastic carrier bag usage at the request of the UK government.

The Rest of EU is the leading consumer of degradable retail plastic bags of the regions in the Research Scope, accounting for 61% of 2009 demand in terms of units. Many Rest of EU countries, including Austria, Belgium, Germany and Netherlands, have a developed composting infrastructure, making hydro-biodegradable retail plastic bags an attractive option over conventional bags. From 2004 to 2008, degradable retail plastic bag demand grew steadily as voluntary and mandated restrictions on traditional plastic bags were implemented by a number of countries, cities and companies amidst growing environmental concerns. The CAGR of degradable retail plastic bag demand by the Rest of EU in terms of

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units from 2004 to 2009 was 14%. Projecting into the future, it is expected that traditional plastic bag restrictions will continue to spur moderate demand growth at 7% CAGR from 2009 to 2014.

In 2009, China only accounted for 3% of degradable retail plastic bag demand in terms of units. Due to the country's low per capita income, retailers and consumers are generally less willing to pay a premium for degradable retail plastic bags over traditional plastic bags than consumers in industrialized nations. In addition, the country lacks adequate composting infrastructure, limiting hydro-biodegradable bag adoption. However, environmental concerns have stimulated some degradable retail plastic bag demand, especially in urban areas where per capita income is rising. As a result, the CAGR of degradable plastic bag demand by China in terms of units from 2004 to 2009 was 51% while the demand from 2009 to 2014 will increase steadily at 19% CAGR as consumers desire the convenience of plastic bags and the environmental friendliness of degradable types.

The primary factor affecting the price of a degradable retail plastic bag is the material of its production — bags that are manufactured from biodegradable resins and conform to the compostability standards cost more than bags made from traditional plastic resins and rendered degradable by the incorporation of a chemical additive. Improvements in production process and economics of scale with increasing volume have led to a substantial reduction in the price of biodegradable plastic resins. Resin prices are expected to decline going forward, which will precipitate further decreases in degradable retail plastic bag prices through 2014.

### DISPOSABLE MEDICAL CONSUMABLES MARKET

Save for the degradable retail plastic bag, our Company also produces or will produce disposable medical consumables including gloves, aprons and garbage bags which are targeted at the United States, United Kingdom, Rest of EU and China markets.

Generally speaking, the key demand drivers for disposable medical consumable include:

- Proliferating epidemic patterns
- Increasing volume of healthcare activity attributable to aging demographic patterns
- Strengthening healthcare infection-control safeguards

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### United States

#### Disposable medical consumable demand by product (million units)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	CAGR	CAGR
	(A)	(A)	(A)	(A)	(A)	(A)	(F)	(F)	(F)	(F)	(F)	09/04	14/09
Medical consumables (mil units)													
— Gloves	27,370	27,880	28,425	28,945	29,480	30,000	30,565	31,125	31,725	32,290	32,870	1.9%	1.8%
— Aprons	4,208	4,331	4,481	4,631	4,770	4,870	5,010	5,155	5,305	5,455	5,610	3.0%	2.9%
— Garbage Bags	2,115	2,185	2,250	2,310	2,370	2,430	2,495	2,565	2,635	2,710	2,785	2.8%	2.8%

(A) actual figures; (F) forecast figures.

Source: Freedonia Custom Research, Inc.

Demand for disposable medical consumables, i.e. gloves, aprons and garbage bags, in the United States grew at a CAGR of 1.9%, 3.0% and 2.8% respectively from 2004 to 2009 in terms of units. It is expected that an increasing volume of healthcare activity attributable to aging demographic patterns and a rising incidence of diseases and disorders will underpin growth in the future. Demand will also gain upward momentum as hospitals, outpatient facilities and other healthcare establishments adopt stricter safeguards to meet infection prevention standards. Forecasted CAGR of demand for gloves, aprons and garbage bags in terms of units are 1.8%, 2.9% and 2.8% respectively from 2009 to 2014.

### United Kingdom

#### Disposable medical consumable demand by product (million units)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	CAGR	CAGR
	(A)	(A)	(A)	(A)	(A)	(A)	(F)	(F)	(F)	(F)	(F)	09/04	14/09
Medical consumables (mil units)													
— Gloves	2,475	2,550	2,620	2,680	2,735	2,830	2,890	2,955	3,020	3,070	3,150	2.7%	2.2%
— Aprons	391	408	425	442	459	475	493	513	533	551	575	4.0%	3.9%
— Garbage Bags	207	214	221	227	233	236	242	248	254	261	268	2.7%	2.6%

(A) actual figures; (F) forecast figures.

Source: Freedonia Custom Research, Inc.

Demand for disposable medical consumables, i.e. gloves, aprons and garbage bags, in the United Kingdom grew at a CAGR of 2.7%, 4.0% and 2.7% respectively from 2004 to 2009 in terms of units. It is expected that the alleviation of healthcare availability problems, magnified by aging demographic trends, will lead to a rise in surgical and outpatient consultation rates, which will boost demand for disposable medical consumable in the future. Forecasted CAGR of demand for gloves, aprons and garbage bags in terms of units are 2.2%, 3.9% and 2.6% respectively from 2009 to 2014.

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### Rest of EU

#### Disposable medical consumable demand by product (million units)

Item	2004 (A)	2005 (A)	2006 (A)	2007 (A)	2008 (A)	2009 (A)	2010 (F)	2011 (F)	2012 (F)	2013 (F)	2014 (F)	CAGR 09/04	CAGR 14/09
Medical consumables (mil units)													
— Gloves	20,710	21,075	21,220	22,145	22,325	23,000	23,465	23,925	24,390	24,865	25,400	2.1%	2.0%
— Aprons	3,066	3,169	3,235	3,430	3,507	3,680	3,815	3,950	4,090	4,235	4,390	3.7%	3.6%
— Garbage Bags	1,670	1,716	1,779	1,843	1,894	1,893	1,935	1,980	2,025	2,070	2,125	2.5%	2.3%

(A) actual figures; (F) forecast figures.

Source: Freedonia Custom Research, Inc.

Demand for disposable medical consumables, i.e. gloves, aprons and garbage bags, in the Rest of EU grew at a CAGR of 2.1%, 3.7% and 2.5% respectively from 2004 to 2009 in terms of units. Germany, France and Italy are the largest disposable medical supply markets in the region. It is expected that positive influences on product demand in the future will include expanding middle-aged and elderly population segments; an increasing incidence of diseases and disorders requiring professional attention; and the upgrading of infection-control standards aimed at preventing the spread of life-threatening illnesses during patient procedures. Forecasted CAGR of demand for gloves, aprons and garbage bags in terms of units are 2.0%, 3.6% and 2.3% respectively from 2009 to 2014.

### China

#### Disposable medical consumable demand by product (million units)

Item	2004 (A)	2005 (A)	2006 (A)	2007 (A)	2008 (A)	2009 (A)	2010 (F)	2011 (F)	2012 (F)	2013 (F)	2014 (F)	CAGR 09/04	CAGR 14/09
Medical consumables (mil units)													
— Gloves	546	619	671	723	775	829	883	938	993	1,048	1,106	8.7%	5.9%
— Aprons	142	155	162	169	174	188	196	203	213	220	230	5.8%	4.1%
— Garbage Bags	738	746	779	800	886	919	950	990	1,020	1,055	1,090	4.5%	3.5%

(A) actual figures; (F) forecast figures.

Source: Freedonia Custom Research, Inc.

Demand for disposable medical consumables, i.e. gloves, aprons and garbage bags, in China grew at a CAGR of 8.7%, 5.8% and 4.5% respectively from 2004 to 2009 in terms of units. The improving availability of inpatient and ambulatory healthcare services will support growth. China's surgical and outpatient consultation rates are expected to rise in the future as hospitals are modernized and broaden capabilities in surgery and general healthcare treatment. Hospitals dominate the delivery of most medical services in China, serving as the base of operations for most doctors. China lacks an integrated network of outpatient facilities and physicians' offices. As a result, residents must usually go to the hospital to receive professional healthcare treatment.



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Besides, a high level of external investment by multinational companies is enabling the country to expand medical product manufacturing capabilities to serve both domestic and export markets. After the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak, China upgraded healthcare infection prevention safeguards, which created significant growth opportunities for disposable medical consumables. Forecasted CAGR of demand for gloves, aprons and garbage bags in terms of units are 5.9%, 4.1% and 3.5% respectively from 2009 to 2014.

According to Freedonia, price increases for disposable plastic medical consumables in the US and United Kingdom are expected to hold steady or moderate through 2014. Prices for plastic goods rose rapidly between 2004 and 2008 as a result of sharp spikes in the prices of petroleum-based raw materials beginning in 2003. Flat or decelerating price growth going forward will be resulting from more moderate increases in raw material prices following the high base of recent years; intensifying price competition among suppliers; increased use of Asia-based manufacturing by US and UK producers; and aggressive volume discounts secured by hospitals and other major end-users when purchasing on contract from a single vendor.

### **THE PRICE TREND OF POLYETHYLENE AND OIL**

The average price of high density polyethylene was around US\$1,100 per metric ton at the beginning of 2007 and the price was on the uptrend from the period between 2007 and the first half of 2008, and reached as high as around US\$1,880 per metric ton in the middle of 2008. Nevertheless, the average price of high density polyethylene declined dramatically to around US\$610 per metric ton in December 2008 amid the emergence of global financial turmoil. The price of high density polyethylene rebounded gradually since the beginning of 2009 and stayed at around US\$1,200 per metric ton by the end of September 2010.

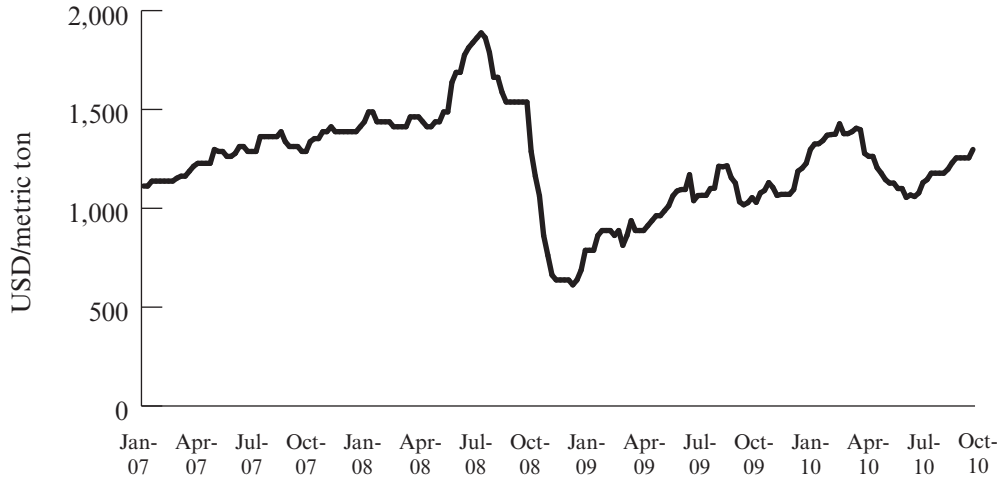
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The following chart sets out the spot price of high density polyethylene (HDPE) for the period between January 2007 and September 2010:

**Polyethylene (HDPE) Spot Price**



*Source:* Bloomberg

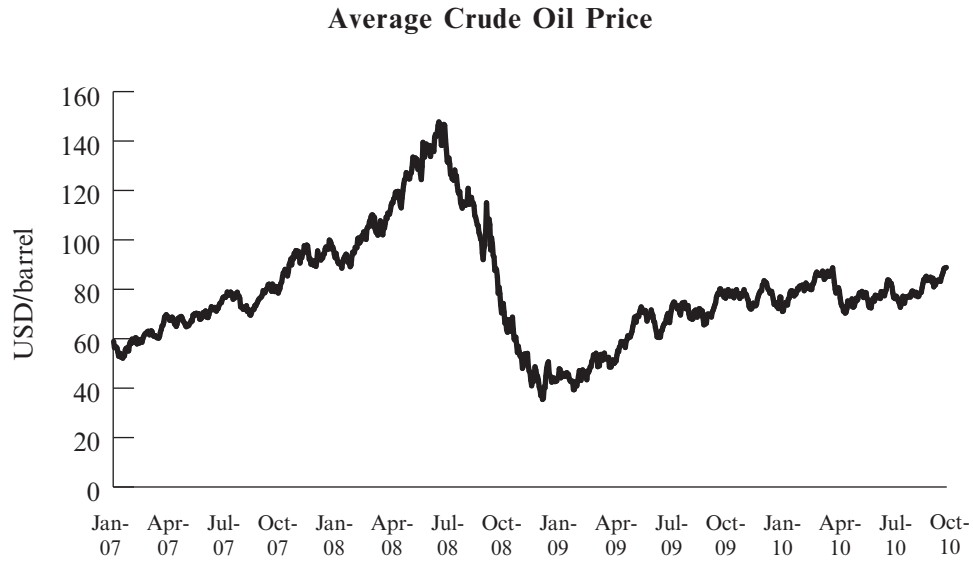
As polyethylene is a by-product of crude oil, the price of polyethylene in some extent is affected by the price of oil. The average oil price was around US\$61 per barrel in January 2007 and was on the uptrend throughout 2007 and the first half of 2008, and climbed as high as around US\$146 per barrel in July 2008. Since then, the average oil price dropped dramatically to as low as US\$35 per barrel towards the end of 2008. The average oil price rebounded gradually since the beginning of 2009 and stayed at around US\$82 per barrel by the end of September 2010.

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The following chart sets out the average crude oil price for the period between January 2007 and September 2010:



Source: Bloomberg