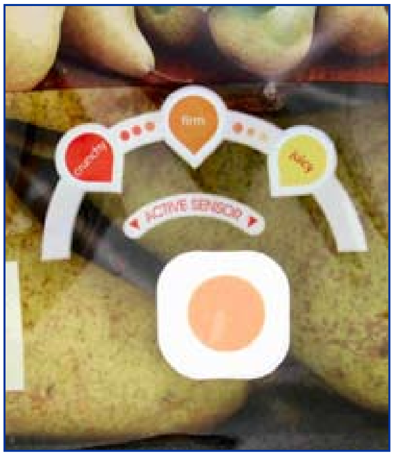

Active & Intelligent Packaging

US Industry Study with Forecasts for **2019 & 2024**

Study #3338 | October 2015 | $5300 | 364 pages

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Active & Intelligent Packaging

US Industry Study with Forecasts for *2019 & 2024*

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Active & Intelligent Packaging

US Industry Study with Forecasts for ***2019 & 2024***

Growth will be driven by food safety concerns and interest in product connectivity, requiring packaging that can more efficiently control gas and moisture, as well as communicate product changes.

US demand to rise 7.3% annually through 2019

Demand for active and intelligent packaging in the US is forecast to expand 7.3 percent annually to $4.0 billion in 2019, well above the packaging industry average. Active packaging provides functions beyond product protection and identification, such as moisture control; intelligent packaging incorporates features that indicate status or communicate product changes and other information. While many active and intelligent packaging products, such as packaged desiccants and volatile corrosion inhibitors, have a well established presence, emerging products include antimicrobial packaging, advanced time-temperature monitors, and smartphone-enabled interactive packaging products. All of these products are expected to see further development over the next decade as food safety concerns and interest in product connectivity create a need for products that can more efficiently perform related functions.

US Active & Intelligent Packaging Demand, 2019
($4 billion)

Intelligent packaging to grow faster

Intelligent packaging demand will see the faster growth, advancing at a double-digit rate and reaching $1.5 billion in 2019 as products such as time-temperature indicators and smart labels and tags become more common. Although many of these products have been seen as unnecessary or cost prohibitive in the past, the development of technology which allows for low cost production of printed electronics and the elimination of specialized electronic readers in favor of smartphones will allow them to enter the mainstream. Rapid adoption of tracking-enabled or interactive packaging components will be driven by recent legislation in the pharmaceutical and food markets which requires producers to take steps to make products safer and easier to recall.

Active packaging driven by gas scavengers

Active packaging demand is forecast to grow 5.4 percent per year to $2.5 billion in 2019. Demand will be driven by growth in gas scavenger products which are benefiting from the development of more advanced technology and the growing preference for foods with fewer additives. Growth in demand for corrosion control packaging, desiccants, and microwave susceptors will register more moderate gains due to market maturity. However, healthy gains will still be observed as products are introduced to perform these standard functions more efficiently. For example, new environmentally friendly corrosion control scavengers have been developed, and desiccants are now being embedded in bottles or caps to provide moisture control for pharmaceuticals.

Active & Intelligent Packaging

US Industry Study with Forecasts for ***2019 & 2024***

Sample Text, Table & Chart

TABLE III-11

MOISTURE CONTROL PACKAGING DEMAND BY TYPE & MARKET (million dollars)

Item	2004	2009	2014	2019	2024
Total Active Packaging Demand					
% moisture control					
Moisture Control Packaging Demand					
By Type:					
Desiccants					
Other					
By Market:					
Food					
Pharmaceuticals					
Electronics					
Other					

SAMPLE TABLE

Source: The Freedonia Group, Inc.

PRODUCTS

Time-Temperature Indicators

Demand for time-temperature indicators in packaging is to increase ... 5 million in 2019, improved c... significance of f... issues, and ... hable foods and ... perature-se... t through the sup... Increased c... sult of the availa... products th... sophistication at low costs. D... the increased pres... value, temperature-sensitive drugs in the pharmaceutical pro... and the need for enhanced tracking and tracing capabilities for perishable foods arising from the requirements of the Food Safety Modernization Act, which was enacted in January 2011.

SAMPLE TEXT

The availability of electronic TTIs that are integrated with radio frequency identification (RFID) capability will also propel gains. Many of these tags are reusable, which brings down overall costs. TTIs that use printed electronics are also expected to gain an expanded presence based on their combination of low cost, suitability for high volume production, and capabilities that include temperature sensing as well as memory, display, and wireless communications. For example, Bemis has an agreement with Norway-based Thin Film Electronics to accelerate the development of sensor labels that use Thin Film's proprietary technology. Targeted areas include temperature-sensitive food and pharmaceutical products, and such products were made commercially available in 2014. The company has a similar agreement with PakSense to distribute smart labels -- which can be used in conjunction with PakSense's TTI labels and other devices using wireless labels and readers -- suppliers and retailers of produce, meat, and seafood in the A... Moderating faster growth will be performance limitations of chemical-type indicators, competition from wireless and oth... temperature monitoring systems that are not employed direc...

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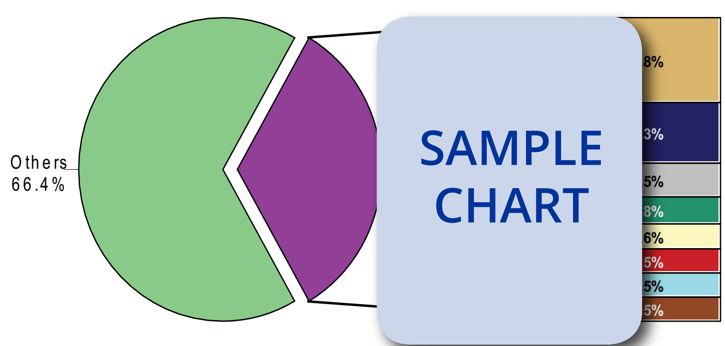
CHART V-1

US ACTIVE & INTELLIGENT PACKAGING MARKET SHARE, 2014 ($2.8 billion)



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US Industry Study with Forecasts for *2019 & 2024*

Sample Profile & Table, & Study Coverage

TABLE IV-3

FOOD MARKET FOR ACTIVE & INTELLIGENT PACKAGING (million dollars)

Item	2004	2009	2014	2019	2024
Food Shipments (bil $)					
$ pkg/000$ food					
Active & Intelligent Packaging Demand					
Processed Foods					
Meat, Poultry, & Seafood*					
Produce					
Dairy Products					
Other					
% food					
Total Active & Intelligent Packaging					

SAMPLE TABLE

*excludes processed meats, which are included in proceesed foods

Source: The Freedonia Group, Inc.

COMPANY PROFILES

Daubert Cromwell LLC
12701 South Ridgeway Avenue
Alsip, IL 6080
708-293-7750
www.daubertc

Annual Sales:
Employment:
Key Products: tings for plastic film and packaging

SAMPLE PROFILE

Daubert C ve coatings, corrosion inhibitor packaging, and related products. The Company is privately held.

The Company is active in the US active and intelligent packaging market through the production of volatile corrosion inhibitor (VCI) protective coatings for plastic film and paper substrates; and corrosion inhibitor packaging. Daubert Cromwell's VCI protective coatings can be applied to plastic film and paper substrates for packaging ferrous, nonferrous, and other metals, among other applications. The VCI molecules align on the surface of the metal to a depth of three to five molecules; this layer of molecules passivates the charged surface and creates a barrier that prevents oxidation. When VCI packaging is unwrapped from metal parts, the protective layer begins to dissipate, leaving the metal clean.

Daubert Cromwell produces a wide range of VCI plastic film and paper products. The Company makes VCI films by extruding VCI corrosion inhibitors into polyethylene film to provide long term protection for metal parts. Specific products include PREMIUM METAL-GUARD multipurpose film, METAL-GUARD FF foil barrier films and

 275

STUDY COVERAGE

This Freedonia study, ***Active & Intelligent Packaging***, presents historical demand data (2004, 2009, 2014) and forecasts (2019, 2024) by product and market. The study also considers market environment factors, details the industry structure, evaluates company market share and profiles 48 US industry competitors.

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Related Studies

Protective Packaging

This study analyzes the US protective packaging industry. It presents historical demand data (2004, 2009 and 2014) and forecasts (2019 and 2024) by protective function (cushioning, blocking and bracing, insulation, void-fill, wrapping), market (manufacturing, non-manufacturing) and packaging type (e.g., flexible, rigid, plastic foam). The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#3356............ December 2015................$5400

Produce Packaging

Demand for produce packaging in the US is forecast to increase 3.2 percent annually to $6.0 billion in 2019. Plastic containers and stand-up pouches will be among the fastest growing package formats, based on their aesthetic appeal and capability to increase brand marketing and recognition. Corrugated boxes will remain the leading type. This study analyzes the $5.1 billion US produce packaging industry, with forecasts for 2019 and 2024 by packaging type, application and end user. The study also evaluates company market share and profiles industry players.

#3319................August 2015...................$5300

Specialty Films

US demand for specialty films is forecast to rise 4.8 percent per year to $8.4 billion in 2019. Barrier films will remain the dominant function, while biodegradable and water soluble films will grow the fastest. The best opportunities for growth in the dominant packaging market will be in meat packaging, while construction will be the fastest growing market overall. This study analyzes the $6.7 billion US specialty film industry, with forecasts for 2019 and 2024 by function, resin, and market. The study also evaluates company market share and profiles industry competitors.

#3287................August 2015...................$5200

Labels

US label demand will rise 3.8 percent annually to $19.7 billion in 2019. In-mold, stretch sleeve and heat-shrink labels will grow the fastest. Digital printing will continue to displace traditional label printing methods. Primary packaging will remain the largest function, while secondary labeling and mailing/shipping labels will pace gains. This study analyzes the $16.3 billion US label industry, with forecasts for 2019 and 2024 by material, application method, printing technology, and function. The study also evaluates company market share and profiles industry players.

#3291..................June 2015.....................$5500

Meat, Poultry & Seafood Packaging

US demand for meat, poultry, and seafood packaging will rise 3.8 percent annually to $10.9 billion in 2019. Flexible packaging will outpace rigid based on performance and sustainability advantages of pouches and high barrier films. Fresh and frozen will remain the dominant market, while the ready-to-eat segment will grow the fastest. This study analyzes the $9 billion US meat packaging industry, with forecasts for 2019 and 2024 by technology, raw material, product, application, and market. The study also evaluates company market share and profiles industry players.

#3263..................April 2015 ....$5300

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