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Rigid Bulk Packaging

US Industry Study with Forecasts for **2013 & 2018**

Study #2483 | March 2009 | \$4700 | 310 pages

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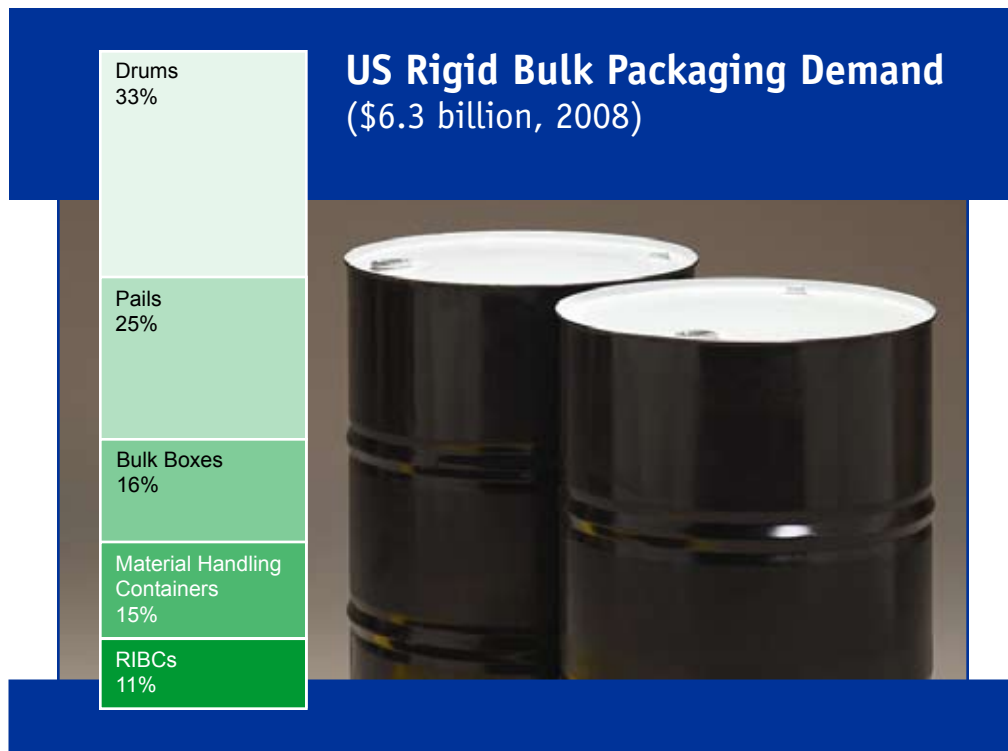
Gains will be bolstered by improved manufacturing activity and a shift in the product mix toward larger, higher-value containers that offer enhanced performance and cost effectiveness.

US demand to rise 2.1% annually through 2013

Demand for rigid bulk packaging is projected to increase 2.1 percent per year to \$7.0 billion in 2013. Gains will be bolstered by an improvement in real manufacturing activity as well as a shift in the product mix toward larger, higher-value containers that offer enhanced performance and cost effectiveness. In addition, demand will be aided by the ongoing need for containers that comply with various regulatory requirements, particularly those involving the transport and handling of hazardous substances and the management of hazardous waste. Demand will be limited by the increasing movement of basic chemical production and packaging to developing countries with lower labor costs.

RIBCs, material handling containers to lead gains

Prospects among the different product segments of the rigid bulk packaging industry will vary. The best opportunities will be found with containers offering a combination of total cost benefits, greater reusability and enhanced performance. Rigid intermediate bulk containers (RIBCs) will register the fastest gains, with demand increasing 4.2 percent annually to \$890 million in 2013 as a result of cost and performance advantages vis-à-vis smaller, single-use or shorter life packaging. Material handling containers will also see above-average growth, driven by increased use of returnable and reusable containers in



the production of durable and other goods to boost manufacturing efficiency and achieve cost savings. Gains will also be supported by a continuing shift to reusable bulk containers in food and agricultural applications. Drum demand will advance less than one percent annually through 2013 to \$2.2 billion as a result of the maturity of steel and fibre drums and a moderation in raw material pricing. In addition, competition from both rigid and flexible intermediate bulk containers will restrain drum sales. However, drums will continue to be the leading rigid bulk packaging product type based on their relatively low cost, reusability and amenability to shipping hazardous materials. Demand for pails will expand in line with the rigid bulk packaging average, with plastic types

continuing to dominate based on their light weight, low cost, and corrosion and impact resistance.

Plastic to outpace other bulk packaging materials

Plastic is the leading rigid bulk packaging material, with steel and paperboard also significant. Through 2013, virtually all material consumption growth will be concentrated in plastic as a result of good prospects for all plastic rigid bulk packaging product segments, particularly heavier containers such as RIBCs and material handling crates. Steel consumption will decline while paperboard use will increase marginally.

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Sample Text, Table & Forecast

MARKETS

Pails: Plastic and steel pails represented a combined 31 percent of rigid bulk packaging demand in chemical product markets in 2008, with plastic pails accounting for 69 percent of pail demand. Through 2008, demand for plastic pails grew at a 2.5 percent annual rate, while steel pails grew at a 1.5 percent annual rate. Demand for steel pails will advance 2.5 percent per year through 2013, slower than plastic pail growth as a result of new applications and a loss of share to plastic pails, which are lighter weight (thus lowering shipping costs) and resistant to denting and corrosion. Nevertheless, steel pails will continue to maintain an entrenched position in paints, coatings and other chemical applications, particularly with solvent-containing substances that cannot be effectively contained in plastic. The paints and coatings market, which accounted for 57 percent of steel pail demand in the chemical product market in 2008, will remain the leading market as a result of steel's strength and protective qualities, and the need for steel containers for solvent-based paints. However, solvent-based paints have lost substantial share to water-based alternatives, thus creating greater opportunities for plastic pails. In addition to paints and coatings, steel pails find use with adhesives, sealants, detergents, cleaners, printing inks, waxes, pigments, dyes, pharmaceuticals, and industrial and agricultural chemicals.

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TABLE IV-8

PLASTIC DRUM DEMAND BY MARKET
(million dollars)

Item	1998	2003	2008	2013	2018
Plastic Drum Shipments	375	400	575	600	850
- net exports					0
Plastic Drum Demand					0
Chemical & Pharm Products:					8
Industrial Chemicals					4
Agricultural Chemicals					2
Pharmaceuticals					7
Detergents & Cleaners					8
Other Chemicals					7
Food & Beverages					1
Petroleum & Lubricants					6
Plastic, Rubber & Fiber					3
Other Markets					2
% plastic drums					1
Rigid Bulk Packaging Demand	3600	4000	5270	5770	8200

SAMPLE
TABLE

"Chemical and pharmaceutical markets for plastic drums will rise 3.1 percent per annum to \$420 million in 2013, driven by plastic drums' various performance advantages, such as light weight and corrosion resistance. However, gains will be prevented from expanding at an even faster pace by meager growth in real terms in basic chemical production, a key application. In addition, gains will be restricted by ..."

--Section IV, pg. 84

Sample Profile, Table & Chart

TABLE V-9

PHARMACEUTICAL MARKET FOR RIGID BULK PACKAGING
 (million dollars)

Item	1998	2003	2008	2013	2018
Pharmaceutical Shpts* (bil \$)	110	110	110	110	110
\$ pkg/000\$ pharmaceuticals					75.0
Pharma Rigid Bulk Pkg Demand					82
Drums:					
Steel Drums					15
Fibre Drums					70
Plastic Drums					97
RIBCs					47
Material Handling Containers					66
Pails & Bulk Boxes					33
% pharmaceutical					6
Chemical Rigid Bulk Pkg Demand	172	172	172	172	20



COMPANY PROFILES

Berenfield Containers Incorporated

1229 Castle Drive
 Mason, OH 45040
 513-398-1300
<http://www.ber>

Annual Sales:
 Employment:

Key Products:



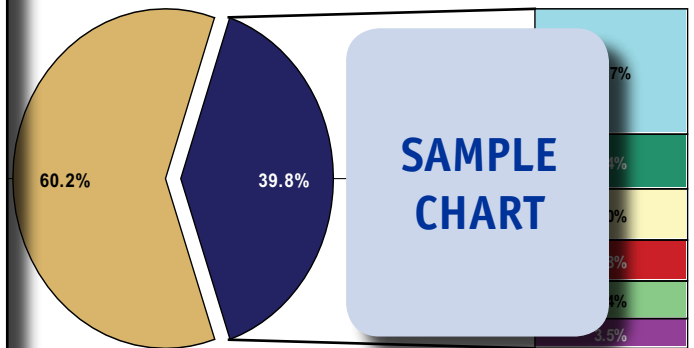
Berenfield Containers produces rigid bulk drums from cold-rolled sheet steel, galvanized sheet steel and kraft linerboard. The privately held company distributes its products to a variety of industries, such as the petroleum industry for the transportation and storage of lubricants, and the agricultural industry for the transportation of such dry products as seeds and feed.

The Company participates in the US rigid bulk packaging industry through the production and sale of steel, composite steel and fibre drums. For example, Berenfield Containers' steel drums, which range in capacity from 6 to 58 gallons, are produced in open- and tight-head configurations and can be specified with lined or unlined interiors. Moreover, these drums are available in custom colors and with silk-screen designs. The Company also makes ULTRA DRUM II steel drums, which feature narrow profiles for space efficiency and 55- or 57-gallon capacities.

Composite drums from Berenfield Containers are constructed from steel with high density polyethylene liners. These 55-gallon containers are produced in open- and tight-head designs. The Company's fibre

CHART VI-1

US RIGID BULK PACKAGING MARKET SHARE, 2008
 (\$6.3 billion)



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OTHER STUDIES

World Corrugated Boxes

This study analyzes the global corrugated box industry. It presents historical demand data for the years 1998, 2003 and 2008 and forecasts for 2013 and 2018 by containerboard grade (kraft linerboard, semichemical medium, recycled board), corrugated box market (food and beverages, other), world regional market (e.g., Asia/Pacific, North America, Western Europe) and major national market. The study also considers market environment factors, evaluates company market share and profiles industry participants.

#2485 04/2009..... \$5600

Green Packaging

This study analyzes the US market for environmentally friendly and sustainable packaging. It presents historical recycled content and reusable packaging demand data (1998, 2003, 2008) and forecasts for 2013 and 2018 by material (paper, metal, glass, plastic, biodegradable plastic) and market (e.g., food, beverage, consumer products, shipping, foodservice). The study also discusses source reduction and recycling activity, competitive strategies and merger and acquisition trends, and profiles industry competitors.

#2471 03/2009..... \$4700

Paper vs Plastic in Packaging

US demand for plastic packaging will continue to outpace paper in markets where they compete, albeit more slowly as applications mature. The fastest market share increases for plastic will occur in pet food and soy beverage packaging, followed by protective packaging, foodservice and dairy products, among others. This study analyzes selected competitive markets in the US for paper and plastic packaging, with forecasts for 2012 and 2017 by material and market. It also discusses market leaders and profiles industry players.

#2443 01/2009..... \$4700

Produce Packaging

US produce packaging demand will rise 4.2% yearly through 2012. Corrugated boxes will stay the top segment, driven by a shift toward more costly types (e.g., modular, lined, moisture-resistant recyclable). Plastic containers will grow the fastest based in part on the expanding use of clamshells and bowls in ready-to-eat, fresh-cut produce. This study analyzes the \$3.8 billion US produce packaging industry, with forecasts for 2012 and 2017 by type, application and end user. It also evaluates market share and profiles industry players.

#2388 08/2008..... \$4600

Pallets

US demand for pallets will reach 1.5 billion units in 2012. Pallets made from wood will remain dominant, while plastic pallets will grow the fastest based on their durability, ease of cleaning and recyclability. Manufacturing will continue as the largest market, but will be outpaced by providers of warehousing and other storage services. This study analyzes the \$15.4 billion US pallet industry, with forecasts for 2012 and 2017 by material, product, market and region. It also evaluates market share and profiles industry competitors.

#2359 06/2008..... \$4500

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