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# Foamed Plastics

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

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Study #2532 | July 2009 | \$4700 | 301 pages

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*Within the dominant urethanes segment, slightly better growth is expected for foamed flexible urethane than its rigid counterpart, the former noted for its excellent cushioning properties.*

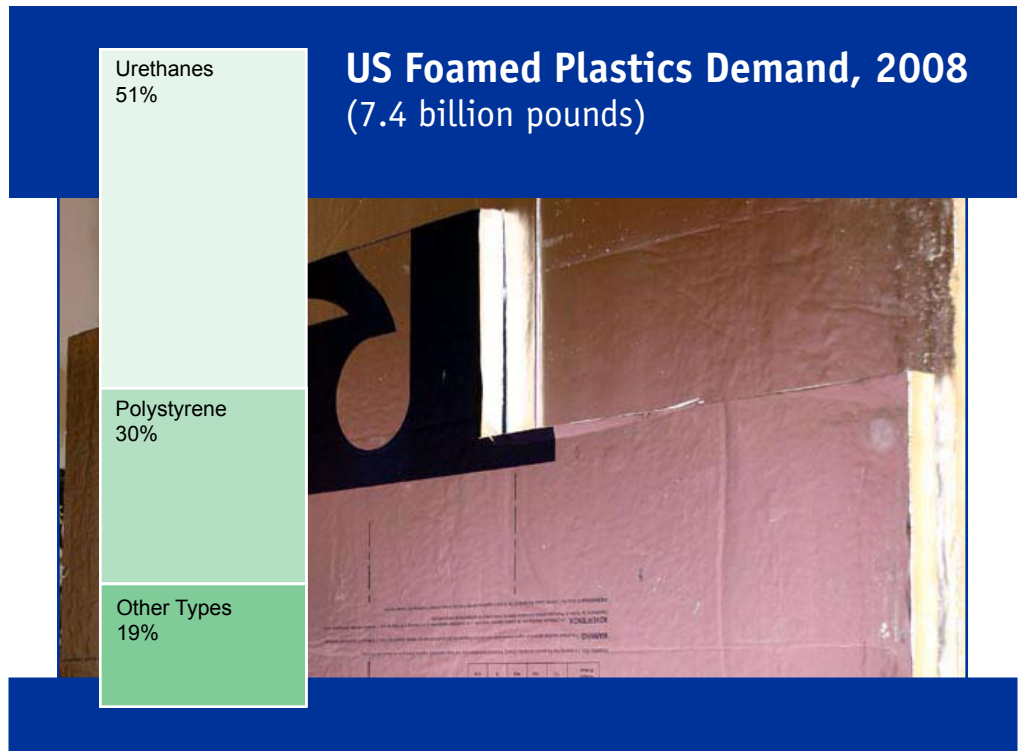
## US demand to reach 8.4 billion pounds in 2013

Demand for foamed plastics is forecast to grow 2.7 percent annually through 2013 to 8.4 billion pounds, valued at \$27.1 billion. Advances will be stimulated by a turnaround in building construction and motor vehicle production. Foamed urethane will continue as the largest type and expand to 4.3 billion pounds in 2013, driven by insulation and cushioning applications.

## Smaller volume types to be fastest growing

Demand for foamed urethane is projected to increase at a 2.8 percent annual pace through 2013. Slightly better growth is expected for foamed flexible urethane than its rigid counterpart. Foamed flexible urethane is noted for its excellent cushioning properties, while rigid urethane has superlative insulating capabilities. Good growth is expected for foamed flexible urethane in motor vehicle and carpet underlay applications in light of rebounding motor vehicle and residential building construction markets. Foamed rigid urethane demand will exhibit rapid advances in building and tank/pipe insulation based on heightened construction activity. In particular, good growth is anticipated for foamed rigid urethane in structural insulated panels.

Demand for foamed polystyrene will rise at a 2.3 percent annual pace to 2.5 billion pounds in 2013 due to myriad packaging and construction insulation



applications. The foam has high thermal insulation properties and excellent protective cushioning capabilities. Packaging will continue to account for 70 percent of all foamed polystyrene's markets in 2013 based on cost and performance advantages over other resins and materials. Further growth will be constrained by competition from paper-based materials and efforts to reduce overall packaging use. Construction and industrial applications for foamed polystyrene revolve around needs for higher-performing insulating materials.

Foamed vinyl demand is expected to increase nearly three percent annually to 265 million pounds in 2013, buoyed by

renewed vigor in the residential building segment, as well as replacement applications for vinyl windows, doors, flooring and other products. Foamed engineering plastics demand is projected to rise 3.4 percent annually to 315 million pounds in 2013 as a result of needs for more cost effective and higher performing materials, particularly in motor vehicle and electrical and electronic applications. Foamed polypropylene opportunities will reflect the resin's low cost, high mechanical strength and other performance properties. The most rapid growth, however, is expected for much smaller volume biodegradable foam in light of increased availability and environmental awareness.

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## Sample Text, Table & Chart

### MARKETS

#### Cups & Containers

Demand for foamed polystyrene used in the manufacture of cups and containers is expected to increase at a rate of 1.1 percent per year through 2013. This growth will reflect rising prices for convenient food and beverage packaging for convenient food and beverage packaging such as quick service restaurants and pizza. Foamed polystyrene is among the most intensively used plastics in the fastest-growing segment of the plastics market. Demand for foamed polystyrene cups will be threatened by competition from other types of rigid containers and flexible packaging (e.g., sandwich wraps), as well as continued source reduction aimed at lowering costs and heightening environmental concerns.

**SAMPLE  
TEXT**

Slightly above-average growth is anticipated for foamed polystyrene cups, to 425 million pounds in 2013, based on advantages over paper-based materials, such as good strength, moisture-resistance and thermal insulation properties. Biodegradable foamed cups will expand at a rapid pace yet represent a small percentage of the cup market. Hot beverages (primarily coffee) are the leading market because of polystyrene's excellent insulating properties. Use in cold beverage cups faces more intense competition from extruded solid polystyrene and paperboard varieties. Dart Container is the leading producer of foamed polystyrene drinking cups.

Demand for foamed polystyrene hinged containers (clamshells) will increase 2.4 percent per year to 180 million pounds in 2013. Further growth will be constrained by competition from paperboard boxes and flexible materials in fast food restaurants, as will lingering environmental concerns over waste disposal. Foamed clamshells keep food warmer longer than paperboard boxes while providing a degree of crush-resistance not afforded by flexible paper packaging. Large clamshells are widely used as take-home containers in full-service restaurants.

TABLE VI-3

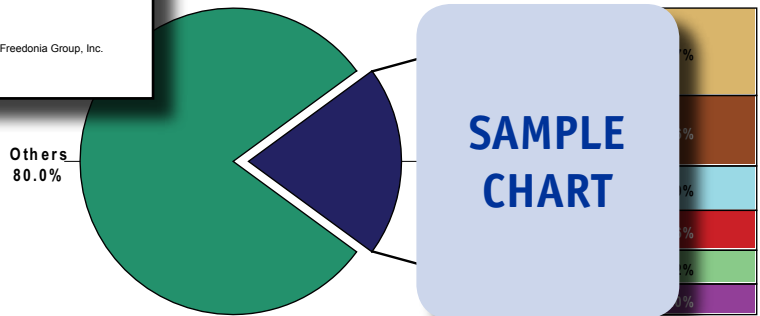
PACKAGING MARKET FOR FOAMED POLYSTYRENE  
(million pounds)

Item	1998	2003	2008	2013	2018
Plastic Packaging Shpts (bil 2000\$) lbs foam/000\$ plastic packaging					54
Foamed Polystyrene in Packaging					00
Protective Packaging					00
Cups					00
Food Trays					00
Plates & Bowls					00
Hinged Containers					00
Egg Cartons					00
Loose-Fill					00
% packaging					20
Foamed Polystyrene Demand					50

**SAMPLE  
TABLE**

CHART IX-1

FOAMED PLASTICS MARKET SHARE, 2008  
(\$22.7 billion)

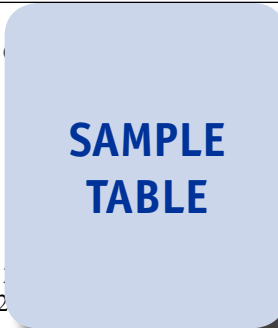


**SAMPLE  
CHART**

## Sample Profile, Table & Forecast

**TABLE V-3**  
**HOUSEHOLD PRODUCT MARKET  
 FOR FOAMED FLEXIBLE URETHANE**  
 (million pounds)

Item	1998	2003	2008	2013	2018
Furniture Shipments (bil 2000\$)					2.7
lbs foam/000\$ furniture					1.9
FFU in Household Products					58
Bedding					50
Furniture					55
Textiles					53
% household products Foamed Flexible Urethane		2			1.7 60



**COMPANY PROFILES**

**Cellofoam North America Incorporated**  
 1917 Rockdale Industrial Boulevard  
 Conyers, GA 30012  
 770-860-4137  
 http://www.cellofoam.com

Annual Sales  
 Employment

Key Products: expanded polystyrene, polystyrene, polyethylene, polyurethane, polyisocyanurate, polyurethane foams; and expanded polystyrene

**SAMPLE PROFILE**

Cellofoam manufactures expanded polystyrene (EPS) foam insulation, architectural and decorative designs, and packaging products, as well as rotationally molded EPS marine flotation products and other plastic foams. The Company is privately held.

The Company is involved in the US foamed plastics industry through the manufacture of such products as CELLOFOAM EPS building insulation, PERMASPAN EPS foam architectural shapes, EPS and other packaging foams, and PERMAFLOAT EPS dock flotation devices. CELLOFOAM EPS building insulation is a rigid, closed-cell, foamed plastic that can be molded in a wide range of densities and sizes to meet various application specifications. This insulation features a stable R-value, as well as enhanced water resistance, physical strength and dimensional stability. CELLOFOAM EPS building insulation is suitable for use in roofing, perimeter, cold storage, exterior and cavity wall, leveling board, non-structural sheathing and other architectural insulation applications. In addition to standard rigid board, CELLOFOAM EPS is also available in other forms, including POLY SHIELD

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“Demand for flexible urethane foams in household products is expected to advance 2.3 percent per annum to 953 million pounds in 2013, driven by cushioning applications in furniture and bedding production. Stimulants include growing disposable personal income levels, with high consumer debt levels constraining additional increases. Flexible polyurethane foam advantages in household products include good compression resistance and memory, as well as durability. Bedding will exhibit the best growth, driven by ...”  
 --Section V, pg. 115



**OTHER STUDIES**

**Foodservice Disposables**

This study analyzes the US foodservice disposables industry. It presents historical demand data (1998, 2003, 2008) and forecasts for 2013 and 2018 by product (e.g., cups, dinnerware, utensils, containers, lids and domes, wraps, bags, napkins, moist tow-elettes) and market (e.g., eating and drinking places, retail and vending machines, institutional, lodging and hospitality, sports and recreation). The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2545 ..... 08/2009..... \$4700

**Fluoropolymers**

US demand for fluoropolymers will rise 4.5% annually through 2013. Gains will be driven in part by a turnaround in key markets such as motor vehicles and wire and cable, and rising demand in fast-growing emerging markets such as advanced batteries, fuel cells and photovoltaic modules. PTFE will remain the largest type while fluoroelastomers will grow the fastest. This study analyzes the \$1.4 billion US fluoropolymer industry, with forecasts for 2013 and 2018. It also evaluates company market share and profiles industry players.

#2496 ..... 05/2009..... \$4600

**Reinforced Plastics**

US demand for reinforced plastics will reach 3.6 billion pounds in 2013. Glass fibers will remain the dominant reinforcement material while carbon fiber and nanomaterial reinforcements grow faster. Reinforced thermosets will remain the largest resin type, with growth slightly outpaced by thermoplastics. This study analyzes the 3.2 billion pound US reinforced plastics industry, with forecasts for 2013 and 2018 by reinforcement, resin and market. It also evaluates market share and profiles industry players.

#2489 ..... 05/2009..... \$4600

**World Insulation**

Global insulation consumption is projected to grow 3.8% yearly through 2012. The fastest growth will occur in developing Asian countries based on strong building construction activity and increasing production of insulated products. Foamed plastic will remain the largest segment while fiberglass gains market share. This study analyzes the \$29.2 billion world insulation industry, with forecasts for 2012 and 2017 by material, market, world region and for 46 countries. It also evaluates company market share and profiles major players.

#2434 ..... 02/2009..... \$5800

**Natural Polymers**

US demand for natural polymers will grow 7.1% annually through 2012. Best opportunities are anticipated in packaging uses based on the increased availability and cost competitiveness of novel polymers such as polylactic acid (PLA). Cellulose ether will remain the largest segment while starch and fermentation products jump at double-digit rates. This study analyzes the \$2.9 billion US natural polymer industry, with forecasts for 2012 and 2017 by market and product. It also evaluates company market share and profiles industry players.

#2422 ..... 11/2008..... \$4600

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