

[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table  
& Chart 5](#)

[Sample Profile, Table &  
Forecast 6](#)

[Order Form & Corporate  
Use License 7](#)

[About Freedonia,  
Custom Research,  
Related Studies, 8](#)



# Pharmaceutical Packaging Products

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US Industry Study with Forecasts for **2018 & 2023**

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## Table of Contents

### EXECUTIVE SUMMARY

### MARKET ENVIRONMENT

Economic Factors .....	4
Demographic Trends .....	9
Trends in Health Care.....	13
Health Insurance Coverage.....	14
Medical Conditions .....	16
Acute Conditions.....	17
Chronic Conditions.....	18
National Health Expenditures .....	21
Spending Categories.....	22
Funding Sources .....	25
Medical Providers .....	27
Patient Activity.....	33
Pharmaceutical Industry Trends.....	36
Regulation .....	38
Research & Development .....	40
Product Demand Patterns.....	41
Product Shipments.....	42
Therapeutic Groups .....	43
Dosage Formulations .....	44
Distribution Classes.....	46
Commercial Status .....	48

### PHARMACEUTICAL PACKAGING OVERVIEW

General .....	52
Demand Patterns & Projections .....	53
Key Issues & Trends.....	58
Patient Prescription Adherence .....	59
Drug Counterfeiting Threat.....	59
Drug Dispensing Accuracy .....	60
Pharmaceutical Packaging Raw Materials.....	61
Plastic Resins .....	62
Paper & Paperboard .....	67
Aluminum Foil .....	69
Glass Materials.....	70
Other Raw Materials.....	72
Semi-Finished Packaging Materials.....	73
Plastic Films .....	74
Converted Paper & Paperboard.....	75
Converted Foil .....	76
Other Semi-Finished Materials .....	76
Historical Pharmaceutical .....	
Packaging Market Trends .....	77
US Trade in Pharmaceutical Packaging Products .....	78
World Pharmaceutical Packaging Markets .....	80

### PRIMARY PHARMACEUTICAL CONTAINERS

General .....	83
Demand by Value.....	84
Demand by Unit .....	86
Plastic Bottles.....	89
Standard Plastic Bottles .....	91
Plastic Dispensing Bottles.....	94
Plastic Jars.....	96

Plastic Cans .....	97
Prescription Vials .....	98
Plastic Pharmaceutical Bottle Suppliers.....	100
Pharmaceutical Blister Packaging .....	101
Blister Packaging Formats .....	101
Standard Compartment Packs .....	103
Slide Packs .....	103
Wallet Packs.....	104
Blister Packaging Components .....	104
Plastic Films .....	105
Lidding Components.....	107
Outer Containers.....	109
Packaging Accessories .....	109
Pharmaceutical Blister Packaging Applications.....	111
Ethical Pharmaceuticals .....	112
Sample Packs.....	113
Producer Packs.....	114
Over-the-Counter Packs.....	115
Clinical Trial Packs .....	117
Prescription Packs .....	118
Pharmaceutical Blister Packaging Suppliers.....	118
Parenteral Containers.....	120
Prefillable Syringes .....	122
Injectors .....	124
Cartridge Systems .....	126
Parenteral Vials .....	129
Glass Vials .....	130
Plastic Vials .....	132
IV Containers.....	133
Semi-Rigid Plastic IV Containers.....	135
Premixed IV Minibags.....	136
Glass IV Containers .....	138
Ampuls .....	139
Prefillable Inhalers .....	140
Metered Dose Inhalers.....	142
Dry Powder Inhalers .....	144
Pharmaceutical Pouches .....	147
Medication Tubes .....	150
Composite Tubes .....	151
All-Plastic Tubes.....	152
Collapsible Metal Tubes .....	154
Glass Pharmaceutical Containers.....	154
Other Primary Pharmaceutical Containers .....	156
Strip Packs .....	158
Paperboard Boxes .....	159
All Other Primary Pharmaceutical Containers.....	159

### PHARMACEUTICAL PACKAGING ACCESSORIES

General .....	162
Pharmaceutical Closures .....	164
Specialty Pharmaceutical Closures .....	166
Elastomeric & Rubber Stoppers.....	167
Dispensing Closures.....	169
Other Specialty Closures.....	171
Child-Resistant Pharmaceutical Closures.....	172
Push-Turn Closures.....	173
Snap-Off Closures.....	174
Standard Pharmaceutical Closures .....	175
Twist/Flip-Off Closures.....	176
Flip-Top Closures.....	177
Overcaps .....	178

Pharmaceutical Closure Suppliers .....	178
Secondary Containers.....	179
Folding Paperboard Boxes .....	180
Corrugated Shipping Containers.....	183
Other Secondary Pharmaceutical Containers.....	185
Trays.....	186
Set-Up Boxes .....	187
Bags & Pouches .....	189
Clamshell Packs .....	189
Pharmaceutical Labels .....	190
Pressure-Sensitive Labels.....	191
Heat-Shrink & Stretch-Sleeve Labels.....	194
Other Pharmaceutical Labels .....	198
Label Security Features .....	200
Other Packaging Accessories .....	202
Package Inserts.....	203
Shrink Materials .....	204
Tamper-Evident Seals .....	205
Desiccants.....	207
All Other Pharmaceutical .....	
Packaging Accessories.....	208

### MARKETS

General .....	212
Pharmaceutical Manufacturing .....	214
Contract Packaging.....	218
Retail Pharmacy.....	221
Institutional Pharmacy .....	223
Other Markets.....	225

### INDUSTRY STRUCTURE

General .....	228
Market Share .....	232
Competitive Strategies.....	238
Mergers & Acquisitions.....	240
Licensing & Related Agreements.....	244
Product Development.....	247
Marketing & Distribution .....	249
Manufacturing .....	251

### COMPANY PROFILES

Alexander (James) Corporation.....	255
Alpha Packaging .....	257
Ancor Limited .....	258
AmerisourceBergen Corporation.....	262
AptarGroup Incorporated.....	264
Baxter International.....	268
Becton, Dickinson, and Company.....	270
Bemis Company .....	273
Berry Plastics .....	275
CCL Industries .....	277
Centor.....	280
Chesapeake Limited.....	282
Clondalkin Group.....	285
Comar Incorporated.....	287
Drug Plastics and Glass .....	288
Gerresheimer Holdings .....	290
GlaxoSmithKline plc .....	293
Holden Industries .....	297
Hospira Incorporated.....	299

(continued on following pages)

## COMPANY PROFILES

(continued from previous page)

Hoffmann Neopac.....	295
Lilly (Eli) and Company.....	304
McKesson Corporation.....	305
MeadWestvaco Corporation.....	306
Menasha Corporation.....	309
Nemera.....	311
Novo Nordisk.....	312
Packaging Coordinators.....	314
Plastic Ingenuity.....	316
Plastube Incorporated.....	317
Qosina Corporation.....	318
Rexam plc.....	319
Sanofi.....	321
SCHOTT AG.....	324
Schreiner Group.....	327
Sonoco Products.....	329
TAGSYS RFID.....	331
3M Company.....	332
Unilife Corporation.....	334
West Pharmaceutical Services.....	336
Other Companies in Pharmaceutical Packaging...	341

## List of Tables/Charts

### EXECUTIVE SUMMARY

1 Summary Table.....	3
----------------------	---

### MARKET ENVIRONMENT

1 Macroeconomic Indicators.....	9
2 Population by Age Group.....	13
3 Health Insurance Coverage OF the US Population.....	16
4 Acute Conditions by Type.....	18
5 Chronic Conditions by Type.....	21
6 National Health Expenditures by Spending Category.....	25
7 National Health Expenditures by Funding Source.....	27
8 Medical Providers by Type.....	29
9 Patient Activity.....	34
10 Pharmaceutical Demand.....	42
11 Pharmaceutical Shipments by Therapeutic Group.....	44
12 Pharmaceutical Shipments by Dosage Formulation.....	45
Cht Pharmaceutical Shipments by Dosage Formulation, 2013.....	46
13 Pharmaceutical Shipments by Distribution Class.....	47
14 Pharmaceutical Shipments by Commercial Status.....	51

### PHARMACEUTICAL PACKAGING OVERVIEW

1 Pharmaceutical Packaging Product Demand by Type.....	57
---	----

Cht Pharmaceutical Packaging Product Demand by Type, 2013.....	58
2 Pharmaceutical Packaging Raw Material Demand by Type.....	62
3 Pharmaceutical Packaging Plastic Resin Demand by Type.....	63
4 Pharmaceutical Packaging Paper & Paperboard Demand.....	69
5 Pharmaceutical Packaging Aluminum Foil Demand.....	70
6 Pharmaceutical Packaging Glass Material Demand.....	71
7 Pharmaceutical Packaging Other Raw Material Demand.....	73
8 Pharmaceutical Packaging Semi-Finished Material Demand.....	74
9 Pharmaceutical Packaging Product Demand, 2003-2013.....	78
10 US Trade in Pharmaceutical Packaging Products.....	79
11 World Pharmaceutical Packaging Product Demand.....	82

### PRIMARY PHARMACEUTICAL CONTAINERS

1 Primary Pharmaceutical Container Value Demand.....	85
Cht Primary Pharmaceutical Containers: Value Demand by Type, 2013.....	86
2 Primary Pharmaceutical Container Unit Demand.....	88
Cht Primary Pharmaceutical Containers: Unit Demand by Type, 2013.....	88
3 Plastic Pharmaceutical Bottle Demand by Type.....	90
4 Standard Plastic Pharmaceutical Bottle Demand by Distribution Class.....	94
5 Plastic Pharmaceutical Dispensing Bottle Demand.....	96
6 Plastic Pharmaceutical Jar Demand.....	97
7 Plastic Pharmaceutical Can Demand.....	98
8 Plastic Prescription Vial Demand.....	100
9 Pharmaceutical Blister Packaging Demand by Format.....	102
10 Pharmaceutical Blister Packaging Demand by Component.....	105
11 Pharmaceutical Blister Packaging Demand by Application.....	112
12 Parenteral Container Demand by Type.....	121
13 Prefillable Syringe Demand by Type.....	123
14 Parenteral Vial Demand by Type.....	130
15 IV Container Demand by Type.....	134
16 Parenteral Ampul Demand by Type.....	140
17 Prefillable Inhaler Demand by Type.....	141
18 Pharmaceutical Pouch Demand by Type.....	149
19 Medication Tube Demand by Type.....	151
20 Glass Pharmaceutical Container Demand by Type.....	156
21 Other Primary Pharmaceutical Container Demand by Type.....	157

### PHARMACEUTICAL PACKAGING ACCESSORIES

1 Pharmaceutical Packaging Accessory Demand by Type.....	163
Cht Pharmaceutical Packaging Accessory Demand by Type, 2013.....	164
2 Pharmaceutical Closure Demand by Type....	165
Cht Pharmaceutical Closure Demand by Type, 2013.....	166
3 Specialty Pharmaceutical Closure Raw Demand by Type.....	167
4 Child-Resistant Pharmaceutical Closure Demand by Type.....	173
5 Standard Pharmaceutical Closure Demand by Type.....	176
6 Secondary Pharmaceutical Container Demand by Type.....	180
7 Folding Paperboard Pharmaceutical Box & Carton Demand.....	183
8 Corrugated Pharmaceutical Shipping Container Demand.....	185
9 Other Secondary Pharmaceutical Container Demand by Type.....	186
10 Pharmaceutical Label Demand by Type.....	191
11 Pharmaceutical Label Demand by Security Features.....	202
12 Other Pharmaceutical Packaging Accessories Demand by Type.....	203
13 Pharmaceutical Package Insert Demand.....	204
14 Pharmaceutical Packaging Shrink Material Demand.....	205
15 Pharmaceutical Packaging Tamper-Evident Seal Demand.....	207
16 Pharmaceutical Packaging Desiccant Demand.....	208
17 All Other Pharmaceutical Packaging Accessory Demand by Type.....	209

### MARKETS

1 Pharmaceutical Packaging Product Demand by Market.....	213
2 Pharmaceutical Manufacturing Market: Pharmaceutical Packaging Products.....	218
3 Contract Packaging Market: Pharmaceutical Packaging Products.....	221
4 Retail Pharmacy Market: Pharmaceutical Packaging Products.....	223
5 Institutional Pharmacy Market: Pharmaceutical Packaging Products.....	225
6 Other Markets: Pharmaceutical Packaging Products.....	22

### INDUSTRY STRUCTURE

1 US Pharmaceutical Packaging Product Sales by Company, 2013.....	229
Cht Pharmaceutical Packaging Products: Merchant Market Share by Company, 2013.....	233
2 Selected Acquisitions & Divestitures.....	243
3 Selected Cooperative Agreements.....	246

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*Led by prefillable syringes, vials, and premixed IV systems, parenteral containers will post the fastest growth in both revenue and unit demand for pharmaceutical packaging products.*

## US demand to rise 4.9% annually through 2018

Demand for pharmaceutical packaging products in the US will increase 4.9 percent annually to \$22.1 billion in 2018. Primary containers will make up two-thirds of the total, with the remainder generated by closures, secondary containers, labels, and other packaging accessories. Led by prefillable syringes, vials, and premixed IV systems, parenteral containers will post the fastest growth in both revenue and unit demand as new injectable and infusion therapies based on biotechnology and other advanced life sciences are introduced into the marketplace. Demand for these containers will exceed that for blister packaging and will generate the second largest share of value demand among primary drug containers in 2018.

## Plastic bottles to remain largest product segment

Reflecting usage in the bulk and prescription dose packaging of oral ethical drugs and the packaging of solid dose oral over-the-counter medicines in large quantities, plastic bottles will continue to record the largest demand among primary pharmaceutical containers, reaching \$4.6 billion in 2018. Blister packaging will remain the leading competitor to plastic bottles in solid oral drug applications and, overall, will post above average revenue growth based on adaptability to unit dose and clinical trial dosage formats.



The value of demand generated by prefillable inhalers will expand somewhat faster than the overall average of primary pharmaceutical containers as the devices build applications in the delivery of asthma, COPD, and, most recently, insulin therapies. By contrast, the market for pharmaceutical pouches will grow at a slightly below average pace as uses remain limited to the unit dose packaging of transdermal, powder, and topical medicines. Advances in aesthetic and barrier properties will keep tubes a leading primary package for topical medication. However, the value of demand posted by these containers will increase at a comparatively slow pace due to competition from plastic dispensing bottles and unit dose pouches.

## Dispensing closures among fastest growing accessories

Demand for pharmaceutical packaging accessories will expand at a slightly slower annual pace than primary containers through 2018. Dispensing closures, parenteral stoppers, security-enhanced labeling, and intelligent components will see the fastest revenue growth. Dispensing closures will see increased use in pharmaceutical applications as they offer improved functional properties. Parenteral stoppers will derive most revenue growth from new drug introductions, upward trends in shipments of injectable therapies, and advantages in drug storage safety.

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**Sample Text,  
 Table & Chart**

**PRIMARY PHARMACEUTICAL CONTAINERS**

**Plastic Bottles**

The US market for plastic pharmaceutical bottles is forecast to increase to \$1.5 billion in 2018, representing 1.5% of the total market. Tablets, caplets, capsules will make up 50% of demand. Additionally, plastic bottles will continue to be used as primary containers for oral dosage forms as well as prescription injectables.

**SAMPLE  
 TEXT**

Plastic pharmaceutical bottles span five major product categories -- standard bottles; dispensing bottles; jars; cans, and prescription Standard bottles consisting of oblongs, ovals, squares, and rectangles are the broadest range of applications, which extend to virtually all solid and liquid dosage formulations of oral drugs, herbal medicines, dietary supplements, and nutritional preparations. Uses of other plastic bottles are narrower in scope. Dispensing bottles provide a combination packaging and delivery system for liquid, spray, and low viscosity medication administered orally or topically.

Plastic jars compete against tubes and wide-mouth glass containers in the packaging of topical drugs. Plastic cans are employed primarily as containers for powder and lyophilized dosage formulations of oral and topical medicines. Included in this group are laxatives; cough, cold, and flu preparations; and medicated powders. Lastly, plastic pre-filled syringes compete against blister packaging in the dispensing of oral injection drugs directly to patients.

Generally, limited adaptability to unit dose and adherence packaging will represent the major moderating influence on long-term growth of plastic pharmaceutical bottle demand. The containers do not provide a viable, cost-effective option for meeting regulations and standards that require the unit dose packaging and bar coding of institutional

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**TABLE IV-15**

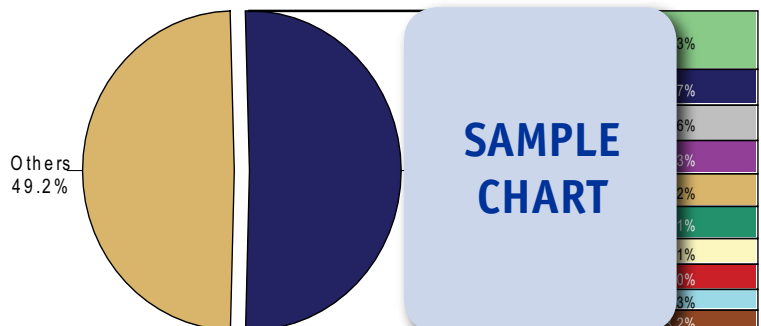
**IV CONTAINER DEMAND BY TYPE**

Item	2003	2008	2013	2018	2023
Parenteral Pharmaceutical Shpts (bil \$)					
\$ IV containers/000\$ shipments					
IV Container Demand (mil \$)					
Semi-Rigid Plastic IV Containers					
Premixed IV Minibags					
Glass IV Containers					
cents/unit					
IV Container Demand (mil units)					
Semi-Rigid Plastic IV Containers					
Premixed IV Minibags					
Glass IV Containers					

**SAMPLE  
 TABLE**

**CHART VII-1**

**PHARMACEUTICAL PACKAGING PRODUCTS,  
 MERCHANT MARKET SHARE BY COMPANY  
 (\$9.7 billion, 2013)**



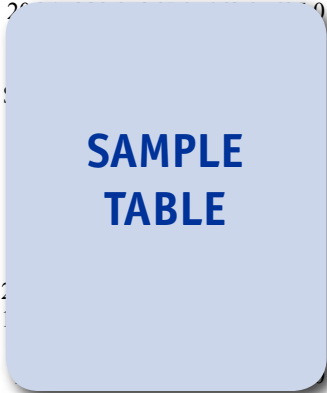
**SAMPLE  
 CHART**

**Sample Profile,  
 Table & Forecast**

**TABLE V-2**

**PHARMACEUTICAL CLOSURE DEMAND BY TYPE**

Item	2003	2008	2013	2018	2023
Pharmaceutical Shipments (bil \$)	200	200	200	200	200
\$ closures/000\$ shpts					
Pharmaceutical Closure Demand (mil units)					
Specialty Closures					
Child-Resistant Closures					
Standard Closures					
cents/unit					
Pharma Closure Demand (mil units)					
Specialty Closures					
Child-Resistant Closures					
Standard Closures					



**COMPANY PROFILES**

**Centor**  
 1899 North Wilkinson Way  
 Perrysburg, OH 43551  
 567-336-2900  
 http://www.centor.com

Annual Sales:  
 Employment:  
 Key Products:

Centor is a leading manufacturer of plastic vials and other containers and related closures suitable for use in a variety of retail, mail order, central fill, and repackaging applications. Centor was formed in May 2014 and purchased the Prescription Retail Packaging division (US) and Pharmaceutical Devices division (France) of Rexam plc (United Kingdom) for \$805 million. In July 2014, the Prescription Retail Packaging division began operating as Centor, and the Pharmaceutical Devices division began operating as Nemera.

The Company is active in the US pharmaceutical packaging industry via the manufacture of plastic vials and other containers and related closures suitable for use in a variety of retail, mail order, central fill, and repackaging applications. Centor's plastic vials include PLASTAINER amber types with snap-on caps, 1-CLIC amber models with child-resistant and senior-friendly closures, and SCREW-LOC amber varieties that feature closures designed to be opened when pushed down and turned. Additional plastic containers from the Company include dropper bottles in 0.5-, 1-, and 2-ounce (oz) models, ointment jars in sizes ranging from 0.5 to 16 oz, 1-oz applicator bottles, and amber oval bottles in capacities of 1 to 16 oz.

Centor conducts manufacturing operations at a plant in Berlin, Ohio. As of February 2014, this facility had the capacity to produce

280

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**STUDY  
 COVERAGE**

**Pharmaceutical Packaging Products** is a Freedonia industry study that offers historical data (2003, 2008, 2013) plus forecasts for 2018 and 2023 for pharmaceutical container and accessories demand by type and market. This study also assesses key market environment factors, evaluates company market share and profiles 39 US industry competitors.