

## Packaging Materials Tables

### Introduction

Packaging materials are an essential component of the complex supply chain for food and beverage products that extends from the production of agricultural commodities on the farm, through processing, packaging, and distribution, through final sale to the consumer. The end-users of many of the machinery components of the supply chain—especially food processing machinery, packaging machinery, and commercial food service equipment—are frequently end-users of packaging materials, as well. Indeed, much of the value of the machinery depends on the availability of suitable packaging for the food and beverage products they are designed to handle. Much the same is true of the supply chains for pharmaceuticals and a wide variety of other consumer packaged goods.

In response to interest expressed by the private sector for data describing U.S. manufacturing, employment, and trade in packaging materials, the Office of Transportation and Machinery (OTM) within the International Trade Administration (ITA) has prepared the tables found below. They are based on data compiled by the U.S. Department of Commerce/Bureau of the Census, Department of Homeland Security/Immigration and Customs Enforcement, and the U.S. International Trade Commission. Manufacturing and employment data are derived from the Census Bureau's Annual Survey of Manufacturers 2008-2010 and the 2007 Economic Census of the United States, and are organized according to the North American Industry Classification System (NAICS).

These tables represent an initial effort by OTM and ITA to document commerce in packaging materials. The creators of the tables have tried to capture comprehensive data for a wide range of materials from publically available sources. OTM staff continues to analyze the export and import data, in particular, in order to better understand the dynamics of U.S. international trade in these products.

### Public Input Welcome

OTM recognizes that the data presented here can benefit from further refinement. Questions, comments, and suggestions from the public are welcome, in particular regarding:

- Product Categories – What has been overlooked, or included incorrectly?
- Percentages – Some materials listed have multiple end uses, only one of which is packaging; are the percentages we assign to packaging realistic?
- Format – How can the tables be made easier to read and understand?
- Other – Anything else we can do to improve this product?

Please direct your comments to:

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**Packaging: FAS Value by NAIC Number  
for ALL Countries  
U.S. Total Exports  
Annual Data**

NAIC Number	Packaging Percentage	2007	2008	2009	2010	2011	Percent Change 2010 - 2011
		In 1,000 Dollars					
314911		55,166	62,274	58,861	68,730	73,430	6.84%
<b>TEXTILE SACKS AND BAGS</b>	<b>100%</b>	<b>55,166</b>	<b>62,274</b>	<b>58,861</b>	<b>68,730</b>	<b>73,430</b>	
314991		138,307	155,791	143,956	171,717	180,631	5.19%
<b>ROPES, CORDAGE, AND TWINE</b>	<b>100%</b>	<b>138,307</b>	<b>155,791</b>	<b>143,956</b>	<b>171,717</b>	<b>180,631</b>	
321920		190,981	254,544	245,536	266,578	268,923	0.88%
<b>WOOD CONTAINERS AND PALLETS</b>	<b>100%</b>	<b>190,981</b>	<b>254,544</b>	<b>245,536</b>	<b>266,578</b>	<b>268,923</b>	
322130		75,066	110,745	103,310	185,807	195,376	5.15%
<b>PAPERBOARD MILL PRODUCTS (1)</b>	<b>72%</b>	<b>54,048</b>	<b>79,736</b>	<b>74,383</b>	<b>133,781</b>	<b>140,671</b>	
322211		1,166,237	1,156,635	1,000,214	1,154,945	1,243,867	7.70%
<b>CORRUGATED AND SOLID FIBER BOXES</b>	<b>100%</b>	<b>1,166,237</b>	<b>1,156,635</b>	<b>1,000,214</b>	<b>1,154,945</b>	<b>1,243,867</b>	
322212		331,323	339,711	338,153	368,822	408,385	10.73%
<b>FOLDING PAPERBOARD BOXES</b>	<b>100%</b>	<b>331,323</b>	<b>339,711</b>	<b>338,153</b>	<b>368,822</b>	<b>408,385</b>	
322213		58,825	63,384	58,841	62,915	73,905	17.47%
<b>SETUP PAPERBOARD BOXES</b>	<b>100%</b>	<b>58,825</b>	<b>63,384</b>	<b>58,841</b>	<b>62,915</b>	<b>73,905</b>	
322214		43,655	43,480	42,281	49,086	50,944	3.79%
<b>FIBER CAN, TUBE, DRUM, AND SIMILAR</b>	<b>100%</b>	<b>43,655</b>	<b>43,480</b>	<b>42,281</b>	<b>49,086</b>	<b>50,944</b>	
322215		285,580	313,370	317,891	338,120	323,133	-4.43%
<b>NONFOLDING SANITARY FOOD</b>	<b>100%</b>	<b>285,580</b>	<b>313,370</b>	<b>317,891</b>	<b>338,120</b>	<b>323,133</b>	
322222		2,904,710	3,106,629	2,849,695	3,390,126	3,589,750	5.89%
<b>COATED AND LAMINATED PAPER (3)</b>	<b>45%</b>	<b>1,307,120</b>	<b>1,397,983</b>	<b>1,282,363</b>	<b>1,525,557</b>	<b>1,615,388</b>	
322224		32,144	40,045	40,083	43,601	45,858	5.18%
<b>UNCOATED PAPER AND MULTIWALL</b>	<b>100%</b>	<b>32,144</b>	<b>40,045</b>	<b>40,083</b>	<b>43,601</b>	<b>45,858</b>	
322299		556,256	586,601	523,578	553,252	634,727	14.73%
<b>ALL OTHER CONVERTED PAPER (3)</b>	<b>54%</b>	<b>300,378</b>	<b>316,765</b>	<b>282,732</b>	<b>298,756</b>	<b>342,753</b>	
325211		25,751,408	27,909,172	22,353,889	28,938,459	31,917,854	10.30%
<b>PLASTICS MATERIALS AND RESINS (1)</b>	<b>27%</b>	<b>6,952,880</b>	<b>7,535,476</b>	<b>6,035,550</b>	<b>7,813,384</b>	<b>8,617,821</b>	
325221		811,892	959,124	985,763	1,047,871	1,148,381	9.59%
<b>CELLULOSIC ORGANIC FIBERS</b>	<b>100%</b>	<b>811,892</b>	<b>959,124</b>	<b>985,763</b>	<b>1,047,871</b>	<b>1,148,381</b>	
325520		1,490,831	1,581,388	1,437,894	1,807,241	1,944,521	7.60%
<b>ADHESIVES (1)</b>	<b>44%</b>	<b>655,966</b>	<b>695,811</b>	<b>632,673</b>	<b>795,186</b>	<b>855,589</b>	
325910		667,609	696,148	663,325	733,936	853,955	16.35%
<b>PRINTING INKS (1)</b>	<b>32%</b>	<b>213,635</b>	<b>222,767</b>	<b>212,264</b>	<b>234,860</b>	<b>273,266</b>	
326112		0	0	0	0	0	
<b>REINFORCED PLASTICS PACKAGING FILMS</b>	<b>100%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
326160		595,446	641,380	587,987	654,938	725,736	10.81%
<b>PLASTICS BOTTLES</b>	<b>100%</b>	<b>595,446</b>	<b>641,380</b>	<b>587,987</b>	<b>654,938</b>	<b>725,736</b>	
326199		10,328,545	10,526,049	9,069,824	10,891,673	12,007,789	10.25%
<b>ALL OTHER PLASTICS PRODUCTS (2)</b>	<b>19.2%</b>	<b>1,983,081</b>	<b>2,021,001</b>	<b>1,741,406</b>	<b>2,091,201</b>	<b>2,305,495</b>	
327213		257,162	286,431	314,810	299,219	311,388	4.07%
<b>GLASS CONTAINERS</b>	<b>100%</b>	<b>257,162</b>	<b>286,431</b>	<b>314,810</b>	<b>299,219</b>	<b>311,388</b>	
331111		13,061,327	17,562,054	11,369,525	14,972,837	17,795,290	18.85%
<b>IRON AND STEEL (1)</b>	<b>5%</b>	<b>653,066</b>	<b>878,103</b>	<b>568,476</b>	<b>748,642</b>	<b>889,765</b>	
331315		3,543,534	3,828,229	2,695,605	3,073,780	3,974,625	29.31%
<b>ALUMINUM (1)</b>	<b>19.9%</b>	<b>705,163</b>	<b>761,818</b>	<b>536,425</b>	<b>611,682</b>	<b>790,950</b>	
332115		422,988	451,071	478,224	539,147	621,469	15.27%
<b>CROWNS, CLOSURES, SEALS AND OTHER</b>	<b>100%</b>	<b>422,988</b>	<b>451,071</b>	<b>478,224</b>	<b>539,147</b>	<b>621,469</b>	
332431		287,705	279,744	305,848	379,874	289,651	-23.75%
<b>METAL CANS</b>	<b>100%</b>	<b>287,705</b>	<b>279,744</b>	<b>305,848</b>	<b>379,874</b>	<b>289,651</b>	
910000		22,712,564	29,189,021	21,790,749	29,527,753	39,307,069	33.12%
<b>WASTE AND SCRAP (3)</b>	<b>14%</b>	<b>3,179,759</b>	<b>4,086,463</b>	<b>3,050,705</b>	<b>4,133,885</b>	<b>5,502,990</b>	
		85,769,264	100,143,020	77,775,845	99,520,429	117,986,657	
<b>PACKAGING MATERIALS TOTAL</b>		<b>20,682,506</b>	<b>23,042,907</b>	<b>19,335,426</b>	<b>23,832,497</b>	<b>27,100,387</b>	<b>13.71%</b>

Sources: Data on this site have been compiled from tariff and trade data from the U.S. Department of Commerce and the U.S. International Trade Commission.  
Prepared by the Office of Transportation and Machinery, 202.482.0554, on 03-09-2012

(1) Percentage estimate from Impact Marketing Consultants, Inc., publisher of The Marketing Guide to the U.S. Packaging Industry, 2006.

(2) Percentage estimate from 2010 Annual Survey of Manufacturers.

(3) Office of Transportation and Machinery estimate.

**Packaging: General Customs Value by NAIC Number  
for ALL Countries  
U.S. General Imports  
Annual Data**

NAIC Number	Packaging Percentage	2007	2008	2009	2010	2011	Percent Change 2010 - 2011
		In 1,000 Dollars					
314911		367,169	440,407	339,300	450,779	529,580	17.48%
<b>TEXTILE SACKS AND BAGS</b>	<b>100%</b>	<b>367,169</b>	<b>440,407</b>	<b>339,300</b>	<b>450,779</b>	<b>529,580</b>	
314991		443,328	485,530	381,364	408,821	455,762	11.48%
<b>ROPES, CORDAGE, AND TWINE</b>	<b>100%</b>	<b>443,328</b>	<b>485,530</b>	<b>381,364</b>	<b>408,821</b>	<b>455,762</b>	
321920		551,084	518,141	371,919	404,645	427,808	5.72%
<b>WOOD CONTAINERS AND PALLETS</b>	<b>100%</b>	<b>551,084</b>	<b>518,141</b>	<b>371,919</b>	<b>404,645</b>	<b>427,808</b>	
322130		126,196	129,410	42,757	54,651	56,906	4.13%
<b>PAPERBOARD MILL PRODUCTS (1)</b>	<b>72%</b>	<b>90,861</b>	<b>93,175</b>	<b>30,785</b>	<b>39,349</b>	<b>40,972</b>	
322211		373,992	362,393	313,646	346,567	391,373	12.93%
<b>CORRUGATED AND SOLID FIBER BOXES</b>	<b>100%</b>	<b>373,992</b>	<b>362,393</b>	<b>313,646</b>	<b>346,567</b>	<b>391,373</b>	
322212		644,294	624,914	605,901	659,233	675,385	2.45%
<b>FOLDING PAPERBOARD BOXES</b>	<b>100%</b>	<b>644,294</b>	<b>624,914</b>	<b>605,901</b>	<b>659,233</b>	<b>675,385</b>	
322213		151,248	162,361	123,539	152,361	168,962	10.90%
<b>SETUP PAPERBOARD BOXES</b>	<b>100%</b>	<b>151,248</b>	<b>162,361</b>	<b>123,539</b>	<b>152,361</b>	<b>168,962</b>	
322214		21,475	20,515	17,742	20,171	17,605	-12.72%
<b>FIBER CAN, TUBE, DRUM, AND SIMILAR</b>	<b>100%</b>	<b>21,475</b>	<b>20,515</b>	<b>17,742</b>	<b>20,171</b>	<b>17,605</b>	
322215		84,412	131,083	130,175	160,890	206,254	28.20%
<b>NONFOLDING SANITARY FOOD</b>	<b>100%</b>	<b>84,412</b>	<b>131,083</b>	<b>130,175</b>	<b>160,890</b>	<b>206,254</b>	
322222		1,267,074	1,214,631	970,212	1,205,351	1,378,320	14.35%
<b>COATED AND LAMINATED PAPER (3)</b>	<b>45%</b>	<b>570,183</b>	<b>546,584</b>	<b>436,595</b>	<b>542,408</b>	<b>620,244</b>	
322224		108,598	116,785	87,124	127,417	141,384	10.96%
<b>UNCOATED PAPER AND MULTIWALL</b>	<b>100%</b>	<b>108,598</b>	<b>116,785</b>	<b>87,124</b>	<b>127,417</b>	<b>141,384</b>	
322299		768,191	796,273	717,640	780,849	878,259	12.47%
<b>ALL OTHER CONVERTED PAPER (3)</b>	<b>54%</b>	<b>414,823</b>	<b>429,987</b>	<b>387,526</b>	<b>421,658</b>	<b>474,260</b>	
325211		10,433,279	10,974,382	7,324,173	9,798,461	11,596,750	18.35%
<b>PLASTICS MATERIALS AND RESINS (1)</b>	<b>27%</b>	<b>2,816,985</b>	<b>2,963,083</b>	<b>1,977,527</b>	<b>2,645,584</b>	<b>3,131,123</b>	
325221		294,005	294,188	233,111	249,473	279,542	12.05%
<b>CELLULOSIC ORGANIC FIBERS</b>	<b>100%</b>	<b>294,005</b>	<b>294,188</b>	<b>233,111</b>	<b>249,473</b>	<b>279,542</b>	
325520		513,242	488,816	372,697	422,045	451,208	6.91%
<b>ADHESIVES (1)</b>	<b>44%</b>	<b>225,826</b>	<b>215,079</b>	<b>163,987</b>	<b>185,700</b>	<b>198,532</b>	
325910		339,149	329,195	309,568	342,346	362,726	5.95%
<b>PRINTING INKS (1)</b>	<b>32%</b>	<b>108,528</b>	<b>105,342</b>	<b>99,062</b>	<b>109,551</b>	<b>116,072</b>	
326112		95,289	105,447	75,911	81,501	76,770	-5.80%
<b>REINFORCED PLASTICS PACKAGING</b>	<b>100%</b>	<b>95,289</b>	<b>105,447</b>	<b>75,911</b>	<b>81,501</b>	<b>76,770</b>	
326160		642,891	709,095	641,363	718,175	812,704	13.16%
<b>PLASTICS BOTTLES</b>	<b>100%</b>	<b>642,891</b>	<b>709,095</b>	<b>641,363</b>	<b>718,175</b>	<b>812,704</b>	
326199		13,233,094	13,660,885	11,774,150	13,983,752	15,302,909	9.43%
<b>ALL OTHER PLASTICS PRODUCTS (2)</b>	<b>19.2%</b>	<b>2,540,754</b>	<b>2,622,890</b>	<b>2,260,637</b>	<b>2,684,880</b>	<b>2,938,159</b>	
327213		907,395	971,960	793,802	934,265	1,073,378	14.89%
<b>GLASS CONTAINERS</b>	<b>100%</b>	<b>907,395</b>	<b>971,960</b>	<b>793,802</b>	<b>934,265</b>	<b>1,073,378</b>	
331111		30,464,196	40,428,361	17,462,323	24,284,503	32,743,960	34.83%
<b>IRON AND STEEL (1)</b>	<b>5%</b>	<b>1,523,210</b>	<b>2,021,418</b>	<b>873,116</b>	<b>1,214,225</b>	<b>1,637,198</b>	
331315		3,360,061	3,092,057	1,717,358	2,519,701	3,020,795	19.89%
<b>ALUMINUM (1)</b>	<b>19.9%</b>	<b>668,652</b>	<b>615,319</b>	<b>341,754</b>	<b>501,420</b>	<b>601,138</b>	
332115		380,925	405,440	402,010	444,219	477,042	7.39%
<b>CROWNS, CLOSURES, SEALS AND OTHER</b>	<b>100%</b>	<b>380,925</b>	<b>405,440</b>	<b>402,010</b>	<b>444,219</b>	<b>477,042</b>	
332431		164,889	184,164	165,870	178,125	170,795	-4.12%
<b>METAL CANS</b>	<b>100%</b>	<b>164,889</b>	<b>184,164</b>	<b>165,870</b>	<b>178,125</b>	<b>170,795</b>	
910000		5,018,262	5,662,268	3,448,212	5,237,984	6,631,312	26.60%
<b>WASTE AND SCRAP (3)</b>	<b>6%</b>	<b>301,096</b>	<b>339,736</b>	<b>206,893</b>	<b>314,279</b>	<b>397,879</b>	
		70,753,736	82,308,702	48,821,866	63,966,285	78,327,490	
<b>PACKAGING MATERIALS TOTAL</b>		<b>14,491,913</b>	<b>15,485,038</b>	<b>11,460,658</b>	<b>13,995,697</b>	<b>16,059,920</b>	<b>14.75%</b>

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(2) Percentage estimate from 2010 Annual Survey of Manufacturers.

(3) Office of Transportation and Machinery estimate.

**Packaging Materials  
Product Shipments  
Annual Data**

NAIC Number*	Packaging Percentage	2007	2008	2009	2010	Percent Change '09-'10
		In 1,000 Dollars				
314911		660,848				
<b>TEXTILE SACKS AND BAGS</b>	<b>100%</b>	<b>660,848</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>31491M</b>			2,797,818	2,400,648	2,475,379	3.11%
<b>TEXTILE BAG AND CANVAS MILLS</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	
314991		841,946	665,894	693,673		
<b>ROPES, CORDAGE, AND TWINE</b>	<b>100%</b>	<b>841,946</b>	<b>665,894</b>	<b>693,673</b>	<b>NA</b>	
321920		7,235,876	6,860,262	5,465,109	5,815,209	6.41%
<b>WOOD CONTAINERS AND PALLETS</b>	<b>100%</b>	<b>7,235,876</b>	<b>6,860,262</b>	<b>5,465,109</b>	<b>5,815,209</b>	
322130		25,354,745	25,009,225	22,761,107	27,028,497	18.75%
<b>PAPERBOARD MILL PRODUCTS (1)</b>	<b>72%</b>	<b>18,255,416</b>	<b>18,006,642</b>	<b>16,387,997</b>	<b>19,460,518</b>	
322211		33,071,335				
<b>CORRUGATED AND SOLID FIBER BOXES</b>	<b>100%</b>	<b>33,071,335</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322212		11,315,208				
<b>FOLDING PAPERBOARD BOXES</b>	<b>100%</b>	<b>11,315,208</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322213		533,245				
<b>SETUP PAPERBOARD BOXES</b>	<b>100%</b>	<b>533,245</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322214		2,327,229				
<b>FIBER CAN, TUBE, DRUM, AND SIMILAR PRODUCTS</b>	<b>100%</b>	<b>2,327,229</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322215		3,653,173				
<b>NONFOLDING SANITARY FOOD CONTAINERS</b>	<b>100%</b>	<b>3,653,173</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>32221</b>			49,191,759	45,363,775	48,062,409	5.95%
<b>PAPERBOARD CONTAINERS</b>	<b>100%</b>	<b>0</b>	<b>49,191,759</b>	<b>45,363,775</b>	<b>48,062,409</b>	
322221		1,493,624				
<b>COATED AND LAMINATED PACKAGING PAPER</b>	<b>100%</b>	<b>1,493,624</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322222		14,260,011				
<b>COATED AND LAMINATED PAPER (4)</b>	<b>45%</b>	<b>6,417,005</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322224		2,368,062				
<b>UNCOATED PAPER AND MULTIWALL BAGS</b>	<b>100%</b>	<b>2,368,062</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322225		1,739,144				
<b>FLEXIBLE PACKAGING FOIL MANUFACTURING</b>	<b>100%</b>	<b>1,739,144</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
322226		1,090,702				
<b>SURFACE COATED PAPERBOARD</b>	<b>100%</b>	<b>1,090,702</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>32222</b>			20,391,046	17,759,428	18,982,777	6.89%
<b>PAPER BAG &amp; COATED &amp; TREATED PAPER (4)</b>	<b>63%</b>	<b>NA</b>	<b>12,764,795</b>	<b>11,117,402</b>	<b>11,883,218</b>	
322299		4,536,069	4,090,122	3,793,799	4,013,905	5.80%
<b>ALL OTHER CONVERTED PAPER PRODUCTS (4)</b>	<b>54%</b>	<b>2,449,477</b>	<b>2,208,666</b>	<b>2,048,651</b>	<b>2,167,509</b>	
325211		85,231,585	82,121,843	61,015,907	78,839,787	29.21%
<b>PLASTICS MATERIALS AND RESINS (1)</b>	<b>27%</b>	<b>23,012,528</b>	<b>22,172,898</b>	<b>16,474,295</b>	<b>21,286,742</b>	
325221		925,820				
<b>CELLULOSIC ORGANIC FIBERS</b>	<b>100%</b>	<b>925,820</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>32522M</b>			7,155,052	5,226,083	6,709,073	28.38%
<b>ARTIFICIAL &amp; SYNTHETIC FIBERS</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	
325520		9,932,941	10,119,337	9,020,371	9,603,228	6.46%
<b>ADHESIVES (1)</b>	<b>44%</b>	<b>4,370,494</b>	<b>4,452,508</b>	<b>3,968,963</b>	<b>4,225,420</b>	
325910		4,990,379	4,370,637	3,879,997	4,826,625	24.40%
<b>PRINTING INKS (1)</b>	<b>32%</b>	<b>1,596,921</b>	<b>1,398,604</b>	<b>1,241,599</b>	<b>1,544,520</b>	
326112		9,562,913	10,117,175	8,481,182	9,313,945	9.82%
<b>REINFORCED PLASTICS PACKAGING FILMS AND SHEETS</b>	<b>100%</b>	<b>9,562,913</b>	<b>10,117,175</b>	<b>8,481,182</b>	<b>9,313,945</b>	
326140		8,112,338	7,641,631	7,056,543	7,200,797	2.04%
<b>POLYSTYRENE FOAM PRODUCT (3)</b>	<b>34%</b>	<b>2,758,195</b>	<b>2,598,155</b>	<b>2,399,225</b>	<b>2,448,271</b>	
326150		9,816,061		6,869,720	7,646,529	11.31%
<b>URETHANE AND OTHER FOAM PRODUCT (2)</b>	<b>6.7%</b>	<b>657,676</b>	<b>NA</b>	<b>460,271</b>	<b>512,317</b>	
326160		11,833,943		10,696,736	10,791,523	0.89%
<b>PLASTICS BOTTLES</b>	<b>100%</b>	<b>11,833,943</b>	<b>NA</b>	<b>10,696,736</b>	<b>10,791,523</b>	
326199		84,129,658				
<b>ALL OTHER PLASTICS PRODUCTS (2)</b>	<b>19.2%</b>	<b>16,152,894</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>32619</b>			80,004,815	66,822,511	73,562,523	10.09%
<b>ALL OTHER PLASTICS PRODUCTS</b>	<b>19.2%</b>	<b>0</b>	<b>15,360,924</b>	<b>12,829,922</b>	<b>14,124,004</b>	
327213		4,843,708	5,088,535		4,923,848	
<b>GLASS CONTAINERS</b>	<b>100%</b>	<b>4,843,708</b>	<b>5,088,535</b>	<b>NA</b>	<b>4,923,848</b>	
331111		100,239,954				
<b>IRON AND STEEL (1)</b>	<b>5%</b>	<b>5,011,998</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>33111M</b>			124,922,907	62,691,720	91,976,163	46.71%
<b>IRON AND STEEL (1)</b>	<b>5%</b>	<b>NA</b>	<b>6,246,145</b>	<b>3,134,586</b>	<b>4,598,808</b>	
331315		18,660,166				
<b>ALUMINUM SHEETS, PLATES, AND FOILS (1)</b>	<b>19.9%</b>	<b>3,713,373</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>33131N</b>			16,415,233	12,395,019	14,736,530	18.89%
<b>ALUMINUM SHEETS, PLATES, AND FOILS (1)</b>	<b>19.9%</b>	<b>NA</b>	<b>3,266,631</b>	<b>2,466,609</b>	<b>2,932,569</b>	
332115		1,072,512				
<b>CROWNS, CLOSURES, SEALS AND OTHER PACKING ACCESSORIES</b>	<b>100%</b>	<b>1,072,512</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>33211P</b>			12,480,641	9,342,760	10,521,390	12.62%
<b>CROWNS, CLOSURES, SEALS AND OTHER PACKING ACCESSORIES</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	<b>Unknown</b>	
332431		13,636,860				
<b>METAL CANS</b>	<b>100%</b>	<b>13,636,860</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>33243M</b>			16,905,165	16,156,221	17,906,489	10.83%
<b>METAL CANS, BOXES AND OTHER METAL CONTAINERS</b>	<b>100%</b>	<b>NA</b>	<b>16,905,165</b>	<b>16,156,221</b>	<b>17,906,489</b>	
Total		473,470,055	486,349,097	377,892,309	454,936,626	20.39%
<b>PACKAGING MATERIALS SUM OF Available data</b>		<b>192,602,126</b>	<b>177,304,758</b>	<b>159,386,216</b>	<b>181,997,321</b>	<b>14.19%</b>

Sources: U.S. Bureau of the Census, U.S. Department of Commerce. 2007 data is from the Economic Census. 2008-2010 data is from the Annual Survey of Manufacturers.

Prepared by the Office of Transportation and Machinery, 202.482.0554, on 03-09-2012

NOTES: \*The North American Industry Classification System (NAICS) codes are used in the Census of Manufacturers and the Annual Survey of Manufacturers. The Census of Manufacturers is conducted every 5 years during the Census years, such as 2007. This industry product data goes to a 7-digit NAICS code. The Annual Survey of Manufacturers is used in the other years (2008, 2009, 2010, etc.). In many cases, the data is collected and compiled in an aggregate 6-digit or 5-digit code. These aggregated codes are indicated in red in this table. NA=Not Available. Unknown-The percentage of the aggregated NAICS code that is packaging material is unknown.

(1) Percentage estimate from Impact Marketing Consultants, Inc., publisher of The Marketing Guide to the U.S. Packaging Industry, 2006.

(2) Percentage estimate from 2010 Annual Survey of Manufacturers.

(3) Percentage estimate from American Chemistry Council.

(4) Office of Transportation and Machinery estimate.

**Packaging Materials  
Employment  
Annual Data**

NAIC Number*	Packaging Percentage	2007	2008	2009	2010	Percent Change '09-'10
		In Actual Employment				
314911		5,722				
TEXTILE SACKS AND BAGS	100%	5,722	NA	NA	NA	
31491M			23,186	19,243	18,687	-2.89%
TEXTILE BAG AND CANVAS MILLS	Unknown	unknown	unknown	unknown	unknown	
314991		4,000	3,999	3,789	3,444	-9.11%
ROPES, CORDAGE, AND TWINE	100%	4,000	3,999	3,789	3,444	
321920		54,467	55,979	46,766	45,261	-3.22%
WOOD CONTAINERS AND PALLETS	100%	54,467	55,979	46,766	45,261	
322130		36,641	34,323	34,876	35,183	0.88%
PAPERBOARD MILL PRODUCTS (1)	72%	26,382	24,713	25,111	25,332	
322211		100,549				
CORRUGATED AND SOLID FIBER BOXES	100%	100,549	NA	NA	NA	
322212		43,132				
FOLDING PAPERBOARD BOXES	100%	43,132	NA	NA	NA	
322213		3,557				
SETUP PAPERBOARD BOXES	100%	3,557	NA	NA	NA	
322214		7,600				
FIBER CAN, TUBE, DRUM, AND SIMILAR PRODUCTS	100%	7,600	NA	NA	NA	
322215		11,001				
NONFOLDING SANITARY FOOD CONTAINERS	100%	11,001	NA	NA	NA	
32221			164,560	142,369	138,054	-3.03%
PAPERBOARD CONTAINERS	100%	NA	164,560	142,369	138,054	
322221		4,937				
COATED AND LAMINATED PACKAGING PAPER	100%	4,937	NA	NA	NA	
322222		34,097				
COATED AND LAMINATED PAPER (4)	45%	15,344	NA	NA	NA	
322224		10,415				
UNCOATED PAPER AND MULTIWALL BAGS	100%	10,415	NA	NA	NA	
322225		4,876				
FLEXIBLE PACAKAGING FOIL MANUFACTURING	100%	4,876	NA	NA	NA	
322226		2,865				
SURFACE COATED PAPERBOARD	100%	2,865	NA	NA	NA	
32222			57,830	50,363	50,337	-0.05%
PAPER BAG & COATED & TREATED PAPER (4)	63%	NA	36,202	31,527	31,511	
322299		17,582	16,752	15,439	15,592	0.99%
ALL OTHER CONVERTED PAPER PRODUCTS (4)	54%	9,494	9,046	8,337	8,420	
325211		71,216	67,389	59,790	58,275	-2.53%
PLASTICS MATERIALS AND RESINS (1)	27%	19,228	18,195	16,143	15,734	
325221		1,353				
CELLULOSIC ORGANIC FIBERS	100%	1,353	NA	NA	NA	
32522M			15,020	13,353	13,717	2.73%
ARTIFICIAL & SYNTHETIC FIBERS	Unknown	unknown	unknown	unknown	unknown	
325520		21,794	22,319	19,919	18,250	-8.38%
ADHESIVES (1)	44%	9,589	9,820	8,764	8,030	
325910		11,996	11,809	12,398	12,775	3.04%
PRINTING INKS (1)	32%	3,839	3,779	3,967	4,088	
326112		24,855	24,707	23,993	25,054	4.42%
REINFORCED PLASTICS PACKAGING FILMS AND SHEETS	100%	24,855	24,707	23,993	25,054	
326140		30,011	29,150	26,156	25,586	-2.18%
POLYSTYRENE FOAM PRODUCT (3)	34%	10,204	9,911	8,893	8,699	
326150		35,825	33,243	25,186	26,093	3.60%
URETHANE AND OTHER FOAM PRODUCT (2)	6.7%	2,400	2,227	1,687	1,748	
326160		34,516	34,277	32,266	30,988	-3.96%
PLASTICS BOTTLES	100%	34,516	34,277	32,266	30,988	
326199		421,780				
ALL OTHER PLASTICS PRODUCTS (2)	19.2%	80,982	NA	NA	NA	
32619			401,572	328,297	326,814	-0.45%
ALL OTHER PLASTICS PRODUCTS	19.2%	NA	77,102	63,033	62,748	
327213		14,694	14,472	14,398	13,834	-3.92%
GLASS CONTAINERS	100%	14,694	14,472	14,398	13,834	
331111		106,610				
IRON AND STEEL (1)	5%	5,331	NA	NA	NA	
33111M			110,240	98,447	96,913	-1.56%
IRON AND STEEL (1)	5%	NA	5,512	4,922	4,846	
331315		17,626				
ALUMINUM SHEETS, PLATES, AND FOILS (1)	19.9%	3,508	NA	NA	NA	
33131N			19,551	18,668	18,382	-1.53%
ALUMINUM SHEETS, PLATES, AND FOILS (1)	19.9%	NA	3,891	3,715	3,658	
332115		3,123				
CROWNS, CLOSURES, SEALS AND OTHER PACKING ACCESSORIES	100%	3,123	NA	NA	NA	
33211P			61,865	49,101	49,344	0.49%
CROWNS, CLOSURES, SEALS AND OTHER PACKING ACCESSORIES		NA	NA	NA	NA	
332431		19,025				
METAL CANS	100%	19,025	NA	NA	NA	
33243M			32,245	29,125	29,345	0.76%
METAL CANS, BOXES AND OTHER METAL CONTAINERS	100%	NA	32,245	29,125	29,345	
Total		1,155,865	1,234,488	1,063,942	1,051,928	-1.13%
PACKAGING MATERIALS SUM of Available data		536,987	530,636	468,807	460,794	-1.71%

Sources: U.S. Bureau of the Census, U.S. Department of Commerce. 2007 data is from the Economic Census. 2008-2010 data is from the Annual Survey of Manufacturers.

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