

**Best Export Markets
For
U.S. Plastics Materials and Resins, 2005**

Best Export Markets for U.S Plastics Materials and Resins was compiled by Chogo Kameya under the supervision of Maurice Kogon, Director of the El Camino College Center for International Trade Development (CITD) in Hawthorne, California. The report is based largely on 2005 Country Commercial Guides (CCGs) prepared by United States Commercial Service (USCS) posts abroad. All those CCGs include a standard chapter “Leading Sector for U.S. Exports.” This report drew from those CCGs which specifically recommended Plastics Materials and Resins as a best prospect for U.S. exports, based on near-term growth potential or a large market receptive to additional U.S. suppliers.

The entire report is also available as a Word document, in print or electronically, for \$25.00. To order, contact the El Camino College CITD at: 310-973-3173 or mkogon@elcamino.edu.

CENTER FOR INTERNATIONAL TRADE DEVELOPMENT
13430 Hawthorne Blvd, Hawthorne, California 90250 USA
<http://elcamino.citd.org>

Phone: (310) 973-3173 Fax: (310) 973-3132 E-mail: mkogon@elcamino.edu.

**Best Export Markets
For
U.S. Plastics Materials and Resins**

TABLE OF CONTENTS	Page
I. EXPORT MARKET OVERVIEW -- NAIC 325211	3
II. MARKET POTENTIAL INDICATORS	4-10
A. Top 30 U.S. Export Markets, 2001–2004 -- NAIC 325211	5
B. Top World Exporters & U.S. Share, 2000–2003	
1. WORLD EXPORTS & U.S. SHARE – SITC 571	6
2. WORLD EXPORTS & U.S. SHARE – SITC 572	7
3. WORLD EXPORTS & U.S. SHARE – SITC 573	8
4. WORLD EXPORTS & U.S. SHARE – SITC 574	9
5. WORLD EXPORTS & U.S. SHARE – SITC 575	10
C. Market Sizes & U.S. Share by Country, 2004	11
III. BEST PROSPECT MARKET ASSESSMENTS	12-17
<ul style="list-style-type: none"> ▪ Belgium ▪ Canada ▪ Chile ▪ Colombia ▪ Costa Rica 	<ul style="list-style-type: none"> ▪ France ▪ Malaysia ▪ Mexico ▪ Peru ▪ Turkey
IV. TRADE EVENTS	18
V. AVAILABLE MARKET RESEARCH	19
VI. APPENDIX: Plastics Materials and Resins, by HS Code	20

I. EXPORT MARKET OVERVIEW

A. PLASTICS MATERIALS AND RESINS -- NAIC 325211

This Market Brief provides an overview of the world market for Plastics Materials and Resins, based on an analysis of the latest trade statistics and market research.

Export Growth: U.S exports of Plastics Materials and Resins rose from \$12.2 billion in 2001 to \$16.5 billion in 2004, an increased of 35.9% over the four-year-period.

Leading Foreign Markets: The leading markets for U.S. Plastics Materials and Resins in 2004 (all valued above \$600 million) were: Canada (24.3% of total), Mexico (19.1%), China (7.3%), Belgium (6.4%), Japan (4.3%). Other major markets (above \$200 million) were: Netherlands (3.3%), Taiwan (3.1%), Hong Kong (3.0%), Brazil (2.8%), Korea (2.6%), Singapore (2.3%) and United Kingdom (1.3%).

Fastest Growing Markets: Of the major, large markets, those-showing-the highest four-year growth rates for U.S. Plastics Materials and Resins were: Peru (+178.2%), India (+125.5%), China (+114.0%), Israel (+112.7%), Turkey (+93.5%), Italy (+91.2%), Ecuador (+80.4%), and Guatemala (+72.4%).. Other (smaller-volume) high-growth markets over the four-year period were: Chile (+63.8%), Colombia (+54.0%), Ireland (+52.8%), Korea (+51.1%), Thailand (+47.6%), and Costa Rica (+45.0%).

Declining Markets: Of the major large volume markets, only one – the UK – showed a declining four-year growth rate for U.S. Plastics Materials and Resins (-3.2%).

Best Market Prospects: The markets listed below appear to be particularly promising for U.S. exports of Plastics Materials and Resins over the next two years. Specific U.S. export statistics on Plastics Materials and Resins are available from the CITD for all countries, including those listed below (Source: U.S. Census Bureau). The CITD also has access to relevant trade contacts, trade opportunities and market research on each country:

- Belgium
- Canada
- Chile
- Colombia
- Costa Rica
- France
- Malaysia
- Mexico
- Peru
- Turkey

II. MARKET POTENTIAL INDICATORS

The market potential indicators include:

A. Top 30 U.S. Export Markets for Plastics Materials and Resins by country. The tables show the leading and fastest growing markets for the U.S. products over the past several years.

Source: USITC Trade Data Web

B. Top 30 World Exporters of Plastics Materials and Resins by country. This table shows the U.S. share of total world exports of Plastics Materials and Resins exports, compared with leading competitor countries.

Source: United Nations COMTRADE

C. Market Sizes for Plastics Materials and Resins, by country, including each country's total imports of Plastics Materials and Resins and imports from the U.S.

Source: U.S. Commercial Staff in each country

II. Market Potential Indicators

A. Top 30 U.S. Export Markets, 2001-2004

Plastics Materials And Resins -- NAICS 325211

Country	2001	2002	2003	2004	% Change 2001- 04	% Change 2003 - 04	% Share 2004
	In \$1,000s						
Canada	3,140,251	3,276,414	3,558,535	4,005,837	27.6%	12.6%	24.3%
Mexico	2,229,815	2,353,428	2,625,066	3,152,502	41.4%	20.1%	19.1%
China	563,460	671,415	843,793	1,205,540	114.0%	42.9%	7.3%
Belgium	739,801	797,440	911,992	1,055,352	42.7%	15.7%	6.4%
Japan	555,878	550,794	547,378	710,368	27.8%	29.8%	4.3%
Netherlands	372,906	370,022	425,194	538,787	44.5%	26.7%	3.3%
Taiwan	391,078	406,348	420,422	516,687	32.1%	22.9%	3.1%
Hong Kong	372,640	411,859	435,970	497,173	33.4%	14.0%	3.0%
Brazil	416,116	333,599	339,978	464,400	11.6%	36.6%	2.8%
Korea	286,171	387,230	372,370	432,501	51.1%	16.1%	2.6%
Singapore	290,890	326,893	332,475	373,160	28.3%	12.2%	2.3%
United Kingdom	229,165	235,467	204,408	221,860	-3.2%	8.5%	1.3%
Germany	184,275	173,606	165,452	196,063	6.4%	18.5%	1.2%
Colombia	122,771	128,903	139,703	189,011	54.0%	35.3%	1.1%
Peru	60,354	84,445	93,719	167,894	178.2%	79.1%	1.0%
Australia	141,892	140,182	130,574	153,324	8.1%	17.4%	0.9%
Israel	68,536	65,687	92,472	145,764	112.7%	57.6%	0.9%
Argentina	132,976	65,354	96,640	144,792	8.9%	49.8%	0.9%
Thailand	91,391	108,450	116,154	134,856	47.6%	16.1%	0.8%
Guatemala	77,228	108,669	93,919	133,148	72.4%	41.8%	0.8%
France	109,586	133,040	120,666	130,323	18.9%	8.0%	0.8%
Costa Rica	89,533	83,799	103,271	129,811	45.0%	25.7%	0.8%
Chile	76,709	67,204	65,277	125,613	63.8%	92.4%	0.8%
Italy	64,248	73,904	80,815	122,871	91.2%	52.0%	0.7%
Ecuador	60,896	60,351	53,385	109,857	80.4%	105.8%	0.7%
Malaysia	75,138	87,113	92,335	105,701	40.7%	14.5%	0.6%
Dominican Rep	81,203	104,944	71,319	97,860	20.5%	37.2%	0.6%
India	38,994	58,756	72,064	87,938	125.5%	22.0%	0.5%
Turkey	39,179	31,579	54,887	75,799	93.5%	38.1%	0.5%
Ireland	45,695	44,776	70,308	69,843	52.8%	-0.7%	0.4%
Subtotal :	11,148,771	11,741,670	12,730,538	15,494,632	39.0%	21.7%	93.8%
All Other:	1,006,522	741,023	771,808	1,018,610	1.2%	32.0%	6.2%
Total	12,155,293	12,482,693	13,502,346	16,513,242	35.9%	22.3%	100.0%

Source: [USITC Trade Data Web](#)

II. Market Potential Indicators

B. Top 30 World Exporters, 2000 – 2003 (Values in \$1,000s)

1. SITC 571: Primary Ethylene Polymer

Exporting Country	2000	2001	2002	2003	% Share 2003
BELGIUM	2,454,178	2,363,080	2,422,990	3,021,608	15.80%
USA	2,687,871	2,416,254	2,589,747	2,816,599	14.73%
CANADA	1,761,341	1,772,883	1,703,065	2,162,392	11.31%
GERMANY	1,599,383	1,634,198	1,317,827	1,610,076	8.42%
NETHERLANDS	907,683	1,077,048	966,563	1,343,484	7.03%
KOREA REP.	1,266,647	1,201,321	1,087,447	1,312,123	6.86%
FRANCE	1,242,730	987,835	892,775	1,065,736	5.57%
SAUDI ARABIA	634,408	1,250,976	1,038,363		0.00%
SINGAPORE	508,231	408,686	646,606	768,498	4.02%
KUWAIT	639,914	620,494			0.00%
JAPAN	602,895	513,148	544,206	561,447	2.94%
SWEDEN	348,547	334,651	377,713	452,719	2.37%
THAILAND	367,183	317,260		433,063	2.26%
SPAIN	394,286	321,607	249,046	398,354	2.08%
ITALY	390,271	355,609	369,005	397,671	2.08%
BRAZIL	345,681	264,102	252,488	382,719	2.00%
MALAYSIA	133,140	149,119	211,320	321,830	1.68%
QATAR	224,470	217,551	255,055		0.00%
UNITED KINGDOM	132,012	159,212	145,482	212,362	1.11%
ARGENTINA	54,885	174,853	181,323	196,784	1.03%
HUNGARY	173,939	145,552	130,081	168,444	0.88%
RUSSIAN FED	227,286	197,217	160,281	167,103	0.87%
INDIA	55,879	66,144	143,037	166,457	0.87%
FINLAND	125,579	123,037	96,061	161,946	0.85%
CZECH REP	70,302	70,372	66,332	124,082	0.65%
PORTUGAL	132,004	93,097	93,067	114,817	0.60%
EGYPT	793	8,769	27,074	95,256	0.50%
ISRAEL	77,587	62,923	58,900	87,221	0.46%
SLOVAKIA	112,383	83,736	82,583	86,103	0.45%
BELARUS	66,521	80,046	64,341	76,450	0.40%
Subtotal:	17,738,029	17,470,780	16,172,778	18,705,344	97.83%
All Other:	601,233	573,640	575,978	414,505	2.17%
Total:	18339262	18,044,420	16,748,756	19,119,849	100.00%

Source: United Nations COMTRADE

Top 30 World Exporters, 2000 – 2003
(Values in \$1,000s)

2. SITC_572: Styrene Primary Polymers

Exporting Country	2000	2001	2002	2003	% Share 2003
KOREA REP.	1,392,155	1,155,803	1,316,691	1,657,150	17.60%
BELGIUM	994,484	910,682	900,455	1,085,377	11.53%
GERMANY	906,431	786,089	793,587	1,021,450	10.85%
USA	848,028	730,548	752,227	783,288	8.32%
JAPAN	759,861	587,679	656,793	697,122	7.40%
NETHERLANDS	556,513	453,459	526,293	636,463	6.76%
FRANCE	532,647	413,068	413,741	458,898	4.87%
SPAIN	155,404	195,615	268,297	313,775	3.33%
THAILAND	417,499	318,476		307,342	3.26%
UNITED KINGDOM	286,902	261,356	285,867	296,544	3.15%
MALAYSIA	259,225	203,082	227,485	294,140	3.12%
SINGAPORE	212,615	159,602	248,394	268,583	2.85%
HONG KONG	305,037	233,003	255,929	250,451	2.66%
MEXICO	180,420	216,178	215,557	206,685	2.19%
ITALY	123,269	115,085	123,370	148,611	1.58%
CANADA	164,646	137,070	140,909	143,901	1.53%
SWEDEN	69,606	59,682	66,659	94,794	1.01%
HUNGARY	72,684	58,088	63,395	92,575	0.98%
CZECH REP	72,484	65,697	79,708	89,959	0.96%
CHINA	89,581	69,025	61,778	76,496	0.81%
FINLAND	61,731	56,639	63,338	73,213	0.78%
BAHAMAS	53,268	71,493			0.00%
INDIA	25,938	32,101	57,919	65,264	0.69%
IRELAND	54,706	48,510	47,031	64,956	0.69%
SAUDI ARABIA	60,569	57,368	61,499		0.00%
CROATIA	29,767	29,817	32,861	41,374	0.44%
BRAZIL	16,867	22,539	37,431	39,665	0.42%
GREECE	18,846	19,583	31,339	34,610	0.37%
COLOMBIA	54,442	47,543	30,023	32,732	0.35%
ARGENTINA	38,152	16,940	26,154	19,448	0.21%
Subtotal	8,813,777	7,531,820	7,784,730	9,294,866	98.70%
All Other	182,410	145,289	128,872	122,493	1.30%
Total	8,996,187	7,677,109	7,913,602	9,417,359	100.00%

Source: United Nations COMTRADE

Top 30 World Exporters, 2000 – 2003
(Values in \$1,000s)

3. SITC 573: Vinyl Chloride Etc Polymer

Exporting Country	2000	2001	2002	2003	% Share 2003
GERMANY	996,176	939,888	995,890	1,200,036	14.88%
USA	1,006,975	1,291,666	1,064,913	1,151,954	14.28%
JAPAN	902,805	679,557	716,187	782,717	9.70%
FRANCE	690,794	533,204	593,908	702,685	8.71%
NETHERLANDS	333,160	490,429	536,835	578,414	7.17%
BELGIUM	597,083	515,929	558,038	568,346	7.05%
ITALY	303,336	275,959	273,581	301,191	3.73%
KOREA REP.	285,474	209,843	185,552	245,415	3.04%
^Q THAILAND	209,384	162,652		225,193	2.79%
UNITED KINGDOM	110,313	145,176	166,470	217,512	2.70%
CANADA	202,653	283,758	191,095	215,013	2.67%
RUSSIAN FED	248,863	210,115	189,552	166,319	2.06%
HUNGARY	152,483	118,713	133,997	152,898	1.90%
SWEDEN	145,690	116,072	118,584	141,904	1.76%
SPAIN	104,733	91,922	108,990	129,767	1.61%
COLOMBIA	103,880	74,324	84,490	124,360	1.54%
MEXICO	134,251	87,795	95,352	108,352	1.34%
PORTUGAL	59,948	64,376	69,307	90,177	1.12%
POLAND	91,112	61,561	73,383	87,501	1.08%
ROMANIA	66,671	52,565	70,321	85,938	1.07%
INDONESIA	168,335	122,326	105,964	84,059	1.04%
CHINA	48,344	47,428	53,505	66,439	0.82%
^Q SAUDI ARABIA	102,351	69,780	58,868		0.00%
SINGAPORE	80,521	55,984	50,778	56,188	0.70%
CZECH REP	81,623	55,199	26,940	54,748	0.68%
ARGENTINA	54,045	47,724	51,437	54,059	0.67%
BRAZIL	30,546	29,387	31,040	46,034	0.57%
SLOVAKIA	41,539	35,131	38,572	40,866	0.51%
FINLAND	36,109	31,694	33,376	38,445	0.48%
^P S.AFR.CUS.UN					0.00%
Subtotal	7,389,197	6,900,157	6,676,925	7,716,530	95.67%
All Other	414,292	353,679	339,504	349,051	4.33%
Total	7,803,489	7,253,836	7,016,429	8,065,581	100.00%

Source: United Nations COMTRADE

Top 30 World Exporters, 2000 – 2003
(Values in \$1,000s)

4. SITC 574: Polyacetals/Polyesters

Exporting Country	2000	2001	2002	2003	% Share 2003
USA	3,004,363	2,906,723	2,828,755	3,040,578	14.42%
NETHERLANDS	1,566,896	1,885,934	2,039,458	2,673,543	12.68%
GERMANY	2,040,904	1,986,083	2,399,367	2,365,756	11.22%
KOREA REP.	1,090,700	1,053,932	1,364,560	1,724,180	8.18%
JAPAN	1,728,510	1,371,373	1,501,974	1,609,868	7.63%
BELGIUM	1,027,186	1,036,590	1,086,583	1,373,055	6.51%
ITALY	840,986	854,519	918,968	1,073,079	5.09%
SPAIN	703,024	690,674	808,585	900,239	4.27%
SINGAPORE	677,659	703,462	664,957	850,579	4.03%
THAILAND	353,884	411,958		644,115	3.05%
FRANCE	561,520	466,853	496,613	636,205	3.02%
CHINA	219,191	250,850	340,855	541,278	2.57%
UNITED KINGDOM	528,660	489,291	495,943	529,523	2.51%
CANADA	468,541	431,705	420,537	411,205	1.95%
SWITZERLAND	293,794	288,966	297,160	355,484	1.69%
MALAYSIA	272,407	278,825	297,396	336,152	1.59%
INDONESIA	316,790	265,546	256,287	292,017	1.38%
MEXICO	186,505	194,877	147,130	290,496	1.38%
AUSTRIA	175,738	181,382	175,245	209,681	0.99%
INDIA	54,042	53,664	51,222	124,120	0.59%
BRAZIL	101,729	68,837	86,151	97,590	0.46%
ARGENTINA	93,358	102,480	103,928	97,411	0.46%
PAKISTAN	20,227	19,291	46,009	88,185	0.42%
POLAND	30,500	39,649	41,025	67,902	0.32%
LUXEMBOURG	49,386	38,758	57,827	67,213	0.32%
SWEDEN	66,057	65,980	62,496	66,689	0.32%
TURKEY	41,394	52,725	51,585	62,490	0.30%
GREECE	28,256	35,470	43,461	59,088	0.28%
FINLAND	27,681	32,984	38,335	53,002	0.25%
CZECH REP	36,203	46,052	48,488	47,108	0.22%
Subtotal	16,606,091	16,305,433	17,170,900	20,687,831	98.11%
All Other	360,753	410,058	401,412	398,783	1.89%
Total	16,966,844	16,715,491	17,572,312	21,086,614	100.00%

Source: United Nations COMTRADE

Top 30 World Exporters, 2000 – 2003
(Values in \$1,000s)

5. SITC 575: Plastic Nes-Primary Form

Exporting Country	2000	2001	2002	2003	% Share 2003
GERMANY	6,550,298	6,403,873	6,125,871	8,490,062	20.45%
USA	5,892,165	5,589,815	6,096,918	6,705,364	16.15%
BELGIUM	3,407,362	3,491,725	3,940,465	4,951,672	11.93%
JAPAN	2,549,734	2,257,583	2,570,349	2,961,974	7.14%
NETHERLANDS	1,889,266	1,949,570	2,144,337	2,644,201	6.37%
FRANCE	1,884,442	1,689,366	1,833,852	2,215,163	5.34%
UNITED KINGDOM	831,017	891,758	1,353,159	1,681,711	4.05%
ITALY	1,354,897	1,372,416	1,411,891	1,576,368	3.80%
KOREA REP.	1,089,872	997,636	1,116,698	1,485,373	3.58%
SINGAPORE	728,045	700,956	922,134	1,079,133	2.60%
SPAIN	676,806	776,090	736,869	937,300	2.26%
CANADA	668,440	627,252	671,480	697,566	1.68%
SWITZERLAND	490,205	466,124	526,624	646,512	1.56%
SWEDEN	426,907	444,592	520,521	609,271	1.47%
THAILAND	482,705	434,388		527,714	1.27%
AUSTRIA	55,929	57,504	60,030	467,360	1.13%
CHINA	208,209	235,699	334,663	448,773	1.08%
INDIA	178,127	229,380	269,765	404,288	0.97%
FINLAND	233,972	237,138	249,764	289,664	0.70%
MALAYSIA	189,078	181,951	228,437	264,572	0.64%
BRAZIL	169,361	132,943	129,446	215,761	0.52%
HUNGARY	114,280	133,374	145,635	175,542	0.42%
SAUDI ARABIA	102,640	139,427	162,800		0.00%
POLAND	106,131	110,406	121,005	154,068	0.37%
ARGENTINA	106,560	111,131	123,855	146,005	0.35%
MEXICO	123,068	83,944	126,948	129,969	0.31%
COLOMBIA	52,217	49,803	78,478	129,116	0.31%
SOUTH AFRICA	60,303	98,702	104,042	128,773	0.31%
SLOVENIA	71,148	70,750	85,117	114,190	0.28%
IRELAND	107,891	106,207	91,165	111,687	0.27%
Subtotal	30,801,075	30,071,503	32,282,318	40,389,152	97.30%
All Other	866,517	866,880	917,575	1,120,521	2.70%
Total	31,667,592	30,938,383	33,199,893	41,509,673	100.00%

Source: United Nations COMTRADE

II. Market Potential Indicators

The best Market matrix (below) provides comparative market size on 10 countries considered “best prospects” for U.S. exports of Plastics Materials and Resins. The countries are listed in alphabetic order, not in rank order. The data on total market, import market, and import from the U.S. are based on local sources and reflect best estimates of USCS commercial officers each country.

Statistical accuracy and comparability to other sources (e.g., “USDOC Bureau of Census”) are affected by a number of factors, including lack of published figures in certain markets, variances in data collection techniques, sources of data, and industry definitions.

C. Market Sizes & U.S. Share, by Country -- Plastic Materials and Resins

Country	Total Market			Total Import			Total Import from US			% US Share 2004
	2002	2004	% Change	2002	2004	% Change	2002	2004	% Change	
Belgium*	10,081.0	4,300.0	-57.3%	8,115.0	7,500.0	-7.6%	1,217.0	900.0	-26.0%	12.0%
Canada	10,337.0	14,114.0	36.5%	4,335.0	5,634.0	30.0%	3,484.0	4,451.0	27.8%	79.0%
Chile	484.0	520.0	7.4%	224.0	302.0	34.8%	25.0	45.0	80.0%	14.9%
Colombia	1,093.9	1,157.2	5.8%	590.3	650.7	10.2%	224.3	247.2	10.2%	38.0%
Costa Rica	128.1	155.3	21.2%	148.6	185.7	25.0%	96.1	119.0	23.8%	64.1%
France	30,828.0	35,585.0	15.4%	8,200.0	8,465.0	3.2%	375.0	340.0	-9.3%	4.0%
Malaysia	3,587.0	3,883.0	8.3%	1,311.0	1,502.0	14.6%	119.0	131.0	10.1%	8.7%
Mexico	4,860.0	5,716.0	17.6%	4,759.0	5,615.0	18.0%	3,612.0	4,548.0	25.9%	81.0%
Peru	177.6	282.8	59.2%	180.6	289.0	60.0%	47.8	72.2	51.0%	25.0%
Turkey	3,612.0	4,000.0	10.7%	2,836.9	3,300.0	16.3%	103.9	140.0	34.8%	4.2%

*2001-2003

III. BEST PROSPECT MARKET ASSESSMENTS

Following are overviews of “best prospect” markets for U.S. Plastics Materials and Resins, based on observations of USCS posts in each country. The countries appear in alphabetical order. For more detailed market research on Plastics Materials and Resins in these and other specific markets, see relevant Market Research Reports listed in Chapter V. For general commercial and economic information on individual countries, see the relevant Country Commercial Guides (CCGs).

BELGIUM

Despite the current general economic slowdown and related decrease in investments and employment, the plastics materials industry in Belgium remains innovative, dynamic, and continues to look to the future for increasingly wider industry applications of plastics materials, i.e., in communication technologies, packaging and automotive sectors. The Belgian plastics materials industry is the world leader in the production and processing in per capita output terms. The industry's total production amounts to \$10.21 billion and employs 29,000 workers.

Fechiplast, the plastics materials industry association, has 145 members in the processing industry, as well as 27 producers and 23 importers/distributors. The industry is the largest contributor to the country's trade balance after the automotive industry. Belgium is the world leader in processing of plastics materials, a highly productive sector, and has the world's most performing plastics producers due to their integration into the world's largest chemical cluster after Houston.

The 145 plastics processors are mainly small companies with an average turnover per company of \$28.4 million with a total 2002 turnover of \$4.25 billion, a 1.1% increase compared to 2001. Employment is down due to the closing of 10 companies and is comparable to the 1999 level. High-energy costs and the world's highest labor costs are harming the industry's ability to compete. Creation of subsidiaries in Eastern Europe

and Turkey are developing. The packaging and construction materials as well as the automotive industry, are the largest and most performing sub-sectors of the plastics processing industry, representing 34%, 27.3% and 14.2% respectively.

Production and distribution of plastic materials amounted to 5 million tons in 2002 for a total turnover of \$5.95 billion, a 4.4% increase over 2001. Production of basic plastic materials increased by 2.7%, while production of finished plastic products decreased by 2.9%. Belgium exports 78% of its plastics production, mainly to its EU partners, particularly Germany and France. In 2002, the plastics industry exports amounted to \$13.8 billion, representing 6.5% of Belgium's total exports. This places the plastics industry as the second ranking sector with a positive trade balance of \$5.39 billion, after the automotive industry. Exports decreased by 1.6% over 2000 levels.

In 2002, total plastics imports amounted to \$8.32 billion mainly from Germany (22%) and the Netherlands (22%). U.S. imports totaled \$992 million, representing 12% of total plastic imports. Imports decreased by 1.7% over 2000 levels.

Despite the 2002 slowdown in growth, the long-term outlook for plastics and resins is favorable due to Belgium's central location in Europe and the port of Antwerp. The Antwerp area has a large concentration of chemical and petroleum industries, which provide a strong local source of raw materials for the plastics and resins industries. Secondly, the outlook is favorable because of the increasing use of

plastics in automobiles and in isolating materials for the construction industry.

CANADA

The Canadian plastic products market was valued at \$11.8 billion in 2003 and is estimated to grow at a real growth rate of 4.5% to \$14.1 billion in 2004 as well as in 2005 and beyond. U.S exports to Canada accounted for 80% of total imports in 2004 for a value of \$4.5 billion. The U.S share of Canada's total imports is also expected to experience growth of 4-5% over the next three years, same as the overall market, as the demand for plastics increases among various consumers of plastic products. Material substitution away from conventional materials in favor of plastics continues to sustain a growing Canadian plastic products market. U.S. suppliers of technologically advanced, innovative, plastic parts and components should find lucrative export opportunities in Canada in all major end-user sectors.

According to industry analysts the plastic processing industry accounts for 0.5% of national gross domestic product (GDP), 0.5% of total national employment, and 3.9% of manufacturing employment. The plastics industry continues to grow faster than overall manufacturing and the economy as a whole. Growth is expected to continue strongly in 2005 and beyond. Plastic products is a high-growth industry whose average annual growth rate continues to be more than double that of total manufacturing and the economy overall. According to the President of the Canadian Plastics Industry Association and based on a recent survey, 60% of Canadian plastic companies plan to add manufacturing capacity in the coming year and 50% intend to purchase primary processing machinery.

Although two of the major markets for plastic products – the motor vehicle and construction industries – are both cyclical, the plastic products industry itself is much less so. The rising general demand for

plastics as a substitute for other materials mutes the cyclical effects.

Major markets for plastic products are in packaging, construction, automotive and electronics. However, plastics are used by virtually every industry sector and continue to displace other materials such as paper, glass, metal, steel and concrete. Plastic is a key material in a wide range of products that include polymer threads (used in clothes and fabrics), electronics and silicon. The use of plastics by end-use markets is projected to grow as a result of the benefits it provides over other materials. Of major significance is the projected high-growth, end-user market in the electronics sector for products such as electronic tags, keyboards and compact discs (CDs), etc.

In 2003, 48% of all plastic sector establishments were located in Ontario, 25% in Quebec, 12% in the Prairie provinces, 11% in British Columbia and 4% in the Atlantic Provinces. Based on value of shipments or employment, 62% of the industry overall and almost the entire automotive component sub sectors are in Ontario.

The U.S. will continue to be Canada's principal supplier of plastic products, followed by China, with less than 10%, Germany and Taiwan. Trade is heavily skewed toward the United States, which accounted for 93% of Canada's exports and 80% of imports in 2004. For many products this will always be the case, because transportation costs limit their export to more distant markets. The dominant position of U.S. suppliers is primarily a function of their proximity to the Canadian market and the preferential duty free access under the North American Free Trade Agreement (NAFTA). In addition, U.S. suppliers have established very reliable distribution and servicing networks in Canada that sustain their dominant position in the market.

U.S. suppliers with innovative, technologically advanced, and

environmentally friendly plastic products will continue to find a highly receptive market in Canada. Companies with vertically integrated product lines that facilitate one-stop shopping also have an added advantage when selling into the Canadian market.

CHILE

The Chilean plastics industry has grown steadily for the last fifteen years. Chilean consumption of plastics jumped from 37.4 pounds per capita in 1991 to 103.7 pounds in 2002. Overall demand for plastic materials and resins in Chile is close to 600,000 metric tons/year and is worth about \$550 million (2004). Roughly 75% of all plastics resins in Chile are imported. Chile's total demand is projected to increase by 15% by 2006.

The Chilean market – made up of some roughly 500 mostly smaller plastics transforming companies, are operating in Chile, of which 80% are concentrated in the capital, Santiago. The market is competitive and price sensitive. Customer service and after-sales support are also critical factors in local buyers' purchasing decisions. A long-term presence in the market and frequent contact with local clients, distributors and/or representatives are critical to carving out market share.

In spite of inroads made by Asian and Latin American suppliers, the U.S. remains one of Chile's main suppliers of plastics material and resins, with a growing 16-18% share.

ENAP, the Chilean oil and gas state owned company, has recently announced investments close to \$1 billion dollars to erect two new petrochemical plants to produce ethylene, polyethylene and polypropylene, mostly to cope with increasing domestic demand for resins.

COLOMBIA

The Colombian plastics processing industry was stable in 2004. According to the National Plastics Association, plastics products production grew by 4% in 2004 and total sales by 4%. Real growth in the plastics sector should average 6% annually during the 2003-2004 period in real terms as the Colombian economy and local demand for plastic products grow and the export programs are accomplished.

The local demand for plastic materials and resins is estimated at 623,000 tons per year, assuming an apparent consumption of 14 kilos of plastic products per capita. Despite production estimated of \$699.3 million in 2002 and \$734.1 in 2003, plastic materials and resins imports account for approximately 55% of the total market, with the U.S. market share averaging 38% for the 2002-2003 period. There is a small amount of competition from Germany, South Korea, Mexico and Venezuela. Colombia is still a large export market for U.S. plastic materials and resins.

Best prospects for U.S. suppliers include polyethylene of 0.94 gravity or more, polyethylene of less than 0.94, linear low-density, polypropylene, polyvinyl chloride emulsions and suspensions and polyesters.

The bottling and packaging industries serving the food processing, health, cosmetics, house cleaning, industrial products, and lubricating products markets are the major clients for plastics materials and resins, followed by the construction sector.

Manufacturing, another important plastic products' end-user, grew by 5.8%. The above industries use approximately 72% of the total imported and locally manufactured plastics materials and resins. Extrusion has the largest demand, accounting for 63% of the market. Injection accounts for 16%; blowing 11%, with calendaring,

thermoforming, and molding accounting for 10%.

COSTA RICA

The total value of the market for plastic materials and resins increased from \$127.20 million in 2001 to \$143.43 million in 2003, a 12% increase. This rise was primarily due to increasing prices in the raw material inputs in 2003. The construction sector, which has grown rapidly over the last two years, is further increasing demand. The consensus within the industry is that the market will grow normally at an annual rate of 7-8% from 2005-2006.

The manufacture of plastic products such as tubing and ducts used in the construction industry, as well as in the water supply and sewage services sector, are integral to the development and growth of Costa Rica. There is considerable local production of plastic products, though no reliable statistics are available.

Since Costa Rica does not have a petrochemical industry, all types of resins are imported. There are two main Costa Rican companies that are involved in the basic transformation of resins. One is a PVC compounder, and the other is an acrylic compounder, primarily for paints. These two resin compounders, as well as all the Costa Rican companies manufacturing plastic products, import their resins, additives, pigments, stabilizers, plasticizers and lubricants. Only certain fillers, like clays, calcium carbonate and some solvents, are found in the local market.

The U.S. is the largest supplier of plastic materials and resins to Costa with a market share of 64.1%. Costa Rican firms prefer U.S. resins for their high quality and prompt, reliable shipments. Major U.S. competitors in this sector are Mexico, Colombia, Germany, Israel, Taiwan, Guatemala, South Korea and Italy.

FRANCE

With over 4200 companies and a total workforce of over 156,000, the French plastics processing industry generated a turnover of \$32.7 billion in 2003. The industry ranks fourth in the world after the United States, Japan and Germany. The trend toward alliances continues, and today multinational corporations and SMEs employing more than 100 persons account for 75% of the industry's sales. The French plastics industry benefited from an upturn of the French economy in 2003; sales were up 4% compared with the previous year. Net profit improved but investment rate remained the same in 2003 as in 2002, at 6% of industry turnover.

In 2003, the French processed plastics market was broken down as follows: packaging (40%), building products (22%), transportation (14%), electronics (7%), sports equipment (5%), furniture (3%), miscellaneous (8%) and medical (1%). With over \$10.7 billion in 2003, plastic parts for the automotive and electrical industries occupied first place in terms of sales, followed by packaging (with a turnover of \$6.9 billion) and building products (with a \$4.7 billion turnover).

European Union countries – specifically Germany, Italy and Belgium – account for 80% of plastics imported by France. The main non-EU suppliers to France are China, Switzerland, and the U.S. In 2003, the U.S. sold \$320 million worth of plastics to France.

In plastics processing, the cost of raw materials accounts for up to 40% of industry turnover. In 2000, the price of these materials started to increase regularly, by 30-60%. Despite the sharp increase in the cost of raw materials, plastics converters were unable to significantly increase prices – especially for the automotive industry. Customers made it clear that if prices were to rise, they would simply look for suppliers outside France. As a result, investment in

new equipment, machinery and technology is essential to increase productivity and maintain profits. Sourcing of raw materials at the lowest price possible is also of paramount importance. The current strength of the Euro can give American companies a competitive advantage and offers niche-market opportunities to U.S. equipments, machineries, technologies and raw materials.

EUROPLAST, the major French exhibition for the plastics industry, takes place in Paris every 3 years. It presents an ideal opportunity for US companies to study the potential of the French market, to assess European competition and to find French distributors.

MALAYSIA

In the 1990s the Malaysian government used its large availability of natural gas resources to develop a petrochemical industry. Malaysia has attracted investments from Japan, the U.S. and Germany to build large resins production facilities. However, Malaysia remains a net importer of plastic resins, despite the large production capacity of local producers.

In 2002, the total market demand of plastic resins was 1.25 million metric tons, of which 60% were polyethylene and polypropylene. Local production was at around 1.4 million metric tons in 2002, of which more than 50% was exported. Thus, Malaysia imports approximately 43% of the total market demand in 2002. In 2003, Malaysia's main suppliers were Singapore, Japan, the U.S., and Thailand, with market shares of 24%, 22%, 6%, and 6% respectively.

The U.S. share equaled \$127 million, a slight increase of 6% compared to 2002. Main resin imports from the U.S. were: polyacetals (\$46.4 million); polyethylene (\$18 million); amino resins, phenol resins and polyurethanes (\$8.4 million); acrylic polymers \$6.6 million); and silicones (\$5 million).

U.S. resins face severe competition from Singapore, Japan, and other Asian countries such as Thailand and Korea. In recent years, Malaysia's import of plastic resins from Asian and ASEAN countries has increased dramatically, due to highly competitive prices and the privilege of low tariff rates enjoyed when trading within the ASEAN region under the ASEAN Free Trade Area (AFTA) agreement.

MEXICO

Mexico's market for plastic materials and resins is closely tied to the electronic sector in the maquiladora industry, since products such as television sets, computer monitors, printers and vacuum cleaners have an estimated 40% plastic content. The largest concentration of this industry is in the border region, which posted an 11% increase in imports during 2004. The electronics industry in Mexico depends on the import of plastic materials/resins, approximately 96% of the total demand. The U.S. has an 81% share of this market.

There are approximately 320 maquiladora plants in Mexico that use mainly plastic materials for their production process and over 110 plants that use at least a 40% plastic content in the production of their products. Over the past two years, imports of plastics and plastic articles have increased by almost 18%. In 2004, the total import market of plastics/resins for the maquiladoras industry ranked second highest, after electronic machinery and equipment.

PERU

The market size of the plastic industry in Peru is \$ 1 billion, includes machinery (mostly Italian and Brazilian), resins, finished goods and molds. Peruvian exports amounted to \$130 million to neighboring Andean community countries (Ecuador and Bolivia). Imports of plastic resins have

grown significantly on an annual basis as illustrated by the statistical records: 2.6% for 2002, 12.5% for 2003 and 22% for 2004.

Market drivers causing this increased demand come from the construction (housing projects), fishing, agribusiness and mining industries. Also, local industrial consumption of plastic bottles, bags and boxes has expanded the demand for plastics goods. External demand will also generate imports of resins and materials, since neighboring countries will request more products.

Despite being an oil producer, Peru is a net importer of oil and derivatives used in the plastics industry. High international petroleum prices coupled with the growing demand for plastic products create excellent opportunities for U.S. exporters. In addition, the depreciation of the U.S. dollar combined with the high regard for U.S. goods gives U.S. exporters a distinct, competitive edge. As Peru does not have a petrochemical industry to support the demands of internal consumption, imports of plastics will continue for years to come.

TURKEY

The plastics industry continues to grow at over 10% per annum. The Turkish plastics industry relies heavily on imported downstream petrochemical components and foreign technologies to manufacture finished plastic products for the domestic and Central Asian markets. Plastic consumption in Turkey is 2.8 million metric tons, making Turkey the sixth largest consumer in Europe. Over six thousand companies are engaged in the plastics industry, most businesses are engaged in either the packaging or the building materials industries.

IV. TRADE EVENTS

Trade events, such as trade shows, trade missions and catalog shows, offer excellent opportunities for face-to-face interaction with foreign buyers and distributors. Of the many U.S. and international events held throughout the year, some are vertical (single industry theme) and some horizontal (many industries represented). The events organized or approved by the U.S. Department of Commerce can be especially useful for first-time or infrequent participants – they require less lead time to register and typically involve more handholding.

The Trade-Event Scheduling Web sites listed below allow selective searches for upcoming events by industry, location, type and date. They typically provide the event organizer, event descriptions and costs, and people to contact for more information.

To find upcoming events for Plastics Materials and Resins, use industry search terms relating to plastics, resins, or chemicals.

Schedules for U.S. Government Organized or Sponsored Events

Domestic USDOC Events: http://www.export.gov/comm_svc/us_event_search.html

International USDOC Events: http://www.export.gov/comm_svc/us_event_search.html

Schedules for Commercially Organized Events

Expo 24-7 (<http://www.expo24-7.com/default.asp>)

TSNN (<http://www.tsnn.com/>)

ExpoWorldNet (<http://www.expoworld.net/>)

Exhibition Center - Foreign Trade Online (<http://www.foreign-trade.com/exhibit.htm>)

V. AVAILABLE MARKET RESEARCH

Plastic Materials and Resins

All the reports listed below are in-depth, country-specific surveys of the market for a specific industry sector or sub-sector, written by U.S. commercial staff in these countries. Each report analyzes demand trends, the competition, business practices, distribution channels, promotional opportunities, and trade barriers.

All the reports can be obtained in print or on disk for \$25.00 from:

CENTER FOR INTERNATIONAL TRADE DEVELOPMENT

13430 Hawthorne Blvd, Hawthorne, California 90250 USA

Phone: (310) 973-3173 Fax: (310) 973-3132 E-mail: mkogon@elcamino.edu

Plastic Materials and Resins	Argentina	9/30/2003
Overview of the Brazilian Petrochemical Industry	Brazil	2/21/2003
New investments in the Brazilian Petrochemical Industry	Brazil	8/20/2003
Thermoplastic Resin Consumption Increase in Brazil	Brazil	1/20/2004
Canadian Plastic Products Industry	Canada	2/23/2004
Plastics Industry: Machinery & Resins	Chile	7/20/2004
A Large Potential Market: Engineering Plastics Industry in China	China	1/26/2003
China Demand for Engineering Plastics To Surge	China	7/10/2003
An Update of the Plastic Industry in Egypt	Egypt	3/24/2004
The German Plastics Market	Germany	6/21/2005
Increase of Domestic Plastic Consumption	Indonesia	3/5/2002
Plastics Material and Resins	Malaysia	6/23/2003
Plastics Processing Industry	Poland	4/18/2005
Plastic Materials/Resins	Slovakia	8/20/2002
Polymers	Taiwan	6/28/2005
Plastics Processing Industry	United Kingdom	8/19/2005
Plastics Brief	Uruguay	6/23/2005
US \$2 Billion for Vietnam's Local Plastics Industry Development	Vietnam	3/15/2002

APPENDIX

Products Included in Plastics Materials and Resins by HS Code

390110	Polyethylene Having a Specific Gravity of Less than 0.94
390120	Polyethylene Having a Specific Gravity of 0.94 or More
390130	Ethylene-vinyl Acetate Copolymers
390190	Other Polymers of Ethylene, in Primary Forms
390210	Polypropylene
390220	Polyisobutylene
390230	Propylene Copolymers
390290	Other Polymers of Propylene or Other Olefins
390311	Expansible Polystyrene
390319	Other Polystyrene
390320	Styrene-acrylonitrile (San) Copolymers
390330	Acrylonitrile-butadiene-styrene (Abs) Copolymers
390390	Other Polymers of Styrene
390410	Polyvinyl Chloride, Not Mixed With Any Other Substances
390421	Other Polyvinyl Chloride (Non-plasticised)
390422	Other Polyvinyl Chloride (Plasticised)
390430	Vinyl Chloride-vinyl Acetate Copolymers
390440	Other Vinyl Chloride Copolymers
390450	Vinylidene Chloride Polymers
390461	Polytetrafluoroethylene
390469	Other Fluoro-polymers
390490	Other Polymers of Vinyl Chloride or of Other Halogenated Olefins
390511	Polymers of Vinyl Acetate (In Aqueous Dispersion)
390519	Other Polymers of Vinyl Acetate
390520	Polyvinyl Alcohols
390590	Polymers of Other Vinyl Esters, Other Vinyl Polymers
390610	Polymethyl Methacrylate
390690	Other Acrylic Polymers
390710	Polyacetals
390720	Other Polyethers
390730	Epoxide Resins
390740	Polycarbonates
390750	Alkyd Resins
390760	Polyethylene Terephthalate
390791	Other Polyesters (Unsaturated)
390799	Halo-isobutene-isoprene Rubber (Ciir)
390810	Polyamide -6, -11, -12, -6, 6 -6, 9, -6, 10, -6, 12
390890	Other Polyamides
391000	Silicones in Primary Forms
391110	Petroleum Resins, Coumarone, Indene, Coumarone-indene Resins, Polyterpenes
391190	Polysulfides, Polysulfones, Furan Resin, Resols, Other Prepolymers