



# 2012 Minerals Yearbook

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## TALC AND PYROPHYLLITE

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# TALC AND PYROPHYLLITE

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In 2012, talc production decreased by 16% to 515,000 metric tons (t) valued at \$17.1 million from 616,000 t valued at \$21.8 million in 2011. The quantity of talc sold, however, increased slightly to 575,000 t valued at \$87.2 million compared with 567,000 t valued at \$87.7 million in 2011. U.S. apparent consumption of talc decreased to 589,000 t in 2012 from 678,000 t in 2011. Exports of talc increased by 13% to 251,000 t valued at \$56.1 million in 2012 from 223,000 t valued at \$52.7 million in 2011. Imports increased by 14% to 325,000 t valued at \$109 million in 2012 from 285,000 t valued at \$77.1 million in 2011. U.S. production and sales of pyrophyllite remained essentially unchanged from that of 2011. Data are withheld to avoid disclosing proprietary information. World production of talc and pyrophyllite decreased slightly to 7.43 million metric tons (Mt) in 2012 from 7.50 Mt in 2011.

## Legislation and Government Programs

In 2012, the U.S. Department of Defense authorized the disposal of 865 t of block and lump talc and 621 t of ground talc, which represented the entire uncommitted inventory of the National Defense Stockpile (NDS).

## Production

**Talc.**—Domestic production data were obtained through a voluntary survey of U.S. mining companies conducted by the U.S. Geological Survey (USGS). Survey forms were sent to five talc companies and responses were received from four. Responses accounted for 95% of the production data presented in table 1. Data for the nonrespondent were estimated from previously reported data adjusted according to trends in production for reporting talc producers and consuming industries and Mine Safety and Health Administration (MSHA) employment data.

Four companies mined talc in 2012, operating six mines in four States. All were open pit mining operations. The producers were, in alphabetical order, Alberene Soapstone Co. in Virginia, American Talc Co. in Texas, Imerys Talc America (formerly Luzenac America, Inc.) in Montana and Vermont, Specialty Minerals Inc. (a subsidiary of Minerals Technologies Inc.) in Montana. CAL-TALC, Inc. in California worked from stockpiles in 2012. The three leading domestic producers, American Talc, Imerys, and Specialty Minerals, collectively, accounted for nearly all of the U.S. tonnage mined.

U.S. mine production decreased by 16% to 515,000 t valued at \$17.1 million compared with 616,000 t valued at \$21.8 million in 2011 (table 1). Production increased in Texas and Virginia and decreased in Montana and Vermont. Production decreased mainly because of the drawdown of ore stocks at mines and mills; not because of reduced demand. Montana led

all States in the tonnage of talc produced, followed by Texas, Vermont, and Virginia.

**Pyrophyllite.**—Domestic production data of pyrophyllite (a hydrous aluminum silicate with a structure similar to talc) were acquired through a voluntary USGS survey of the two U.S. companies. One company responded to the survey. Data for the nonrespondent were estimated from previously reported data adjusted according to consuming industry trends and MSHA employment data.

Standard Mineral Co., the leading U.S. pyrophyllite producer, operated two mines in North Carolina. Standard Industrial Minerals, Inc. had one mine in California. U.S. pyrophyllite production remained unchanged in 2012. Domestic data were withheld to avoid revealing company proprietary data.

## Consumption

Domestic consumption data for talc and pyrophyllite were developed by the USGS from a voluntary survey of U.S. mills. Survey forms were sent to six companies operating seven mills in five States for talc and two companies operating two mills in two States for pyrophyllite. Responses from five companies accounted for 95% of the talc data presented in table 2. The remaining data were estimated from preliminary data, previously reported data adjusted according to trends in production for reporting talc producers and consuming industries, and MSHA employment data.

**Talc.**—Sales and use increased slightly to 575,000 t of talc valued at \$87.2 million in 2012, compared with 567,000 t valued at \$87.7 million in 2011 (table 1). U.S. producers reported that talc sold for domestic use increased slightly to 463,000 t in 2012 from 461,000 t in 2011. Ceramics (mainly ceramic tile) was the leading market, followed by paper, paint, other and (or) unknown uses, roofing, plastics, cosmetics, and rubber, in decreasing order of tonnage (table 2). Sales to paper markets increased; sales to other markets remained relatively unchanged.

Sales of talc to manufacturers of adhesives, caulks, ceramics (mainly tile), paint, and roofing were tied to commercial and home construction and renovation. Construction starts for new privately owned housing increased by 28% to 781,000 units in 2012 from 609,000 units in 2011. The value of all construction (residential and commercial) increased by 10% to \$854 billion in 2012 from \$778 billion in 2011 (U.S. Census Bureau, 2013a; undated).

The U.S. International Trade Commission (undated) reported that imports of ceramic tile under Harmonized Tariff Schedule of the United States (HTS) codes 6907.10.00, 6908.10.10, 6908.10.20, and 6908.10.50 decreased in quantity to 5.86 million square meters valued at \$62.1 million in 2012 from 7.80 million square meters valued at \$71.5 million in 2011. Ceramic tile is a major market for talc, and U.S. producers sell

their talc to domestic tile manufacturers, whose tile competes with imported ceramic tile.

Most of the 325,000 t of imported talc listed in table 4 was not included in the domestic end-use data in table 2. About 65,000 to 75,000 t of imports brought into the United States in 2012 probably were stockpiled, based on recent talc market trends. U.S. consumption of imported talc was estimated to be about 250,000 t of the 325,000 t imported in 2012. An estimated end-use itemization for talc imports in 2012 is plastics, 155,000 t; paint, 25,000 t; cosmetics, 20,000 t; ceramics, 12,000 t; paper and rubber, 8,000 t each; and other (unspecified or unknown), 22,000 t. Combining domestic sales by U.S. producers (table 2) with sales of imported talc, markets in the United States were, in decreasing order of consumption, plastics, ceramics, paint, paper, other (unspecified or unknown), roofing, cosmetics, and rubber.

**Pyrophyllite.**—In 2012, domestic consumption of pyrophyllite remained unchanged from that of 2011; data are withheld to avoid disclosing company proprietary data. Pyrophyllite was used in refractory products, paint, ceramics, and unspecified applications, in decreasing order of consumption. Refractory uses accounted for more than 50% of domestic pyrophyllite sales.

## Prices

In 2012, the unit value of crude talc was estimated to be \$33 per metric ton compared with \$35 per ton in 2011. Nearly all talc sold in the United States was sold only after crushing and grinding. Following sorting to remove waste, primary crushing, and screening, the unit value of the unmilled talc would likely range from \$50 to \$60 per ton. The average reported unit value of processed talc was \$152 per ton in 2012, slightly less than that of 2011. A lower unit value reported by one producer accounted for the decrease in average unit value in 2012. Other producers reported slightly higher unit values. The unit value of crude and processed pyrophyllite was unchanged from that of 2011.

The average free alongside ship unit value of all exports decreased to \$223 per ton in 2012 from \$236 per ton in 2011. The unit value for milled talc [Harmonized Tariff Schedule (HTS) code 2526.20.00] exports decreased to \$223 per ton in 2012 from \$236 per ton in 2011. The unit value for exports of unmilled talc (HTS code 2526.10.00) increased to \$441 per ton in 2012 from \$420 per ton in 2011. The average unit value of unmilled talc was greater than that of milled talc because of a large number of high-value, low-tonnage exports relative to the total export tonnage of unmilled talc.

The average customs unit value for all talc imports was \$336 per ton in 2012 compared with \$270 per ton in 2011. The average unit value for imports of unground talc (HTS code 2526.10.00.00) was \$468 per ton in 2012, a large increase from \$207 per ton in 2011. This was attributed mainly to imports of high-value talc from China. The average customs value for ground talc (HTS code 2526.20.00) was \$251 per ton in 2012, an increase from \$217 per ton in 2011. The increase took place because the unit value of imports from several of the major trade partners increased in 2012. The average customs value for cut or sawed talc (HTS code 6815.99.20.00) was \$1,090 per ton, an increase from \$1,070 per ton in 2011.

## Foreign Trade

Detailed talc trade statistics, by country and U.S. port districts, are available from the U.S. International Trade Commission on its Interactive Tariff and Trade Data web Website (U.S. International Trade Commission, undated). U.S. talc exports increased 13% in tonnage to 251,000 t valued at \$56.1 million in 2012 from 223,000 t valued at \$52.7 million in 2011. By tonnage, Mexico was the leading destination for talc exported from the United States with 31% of the quantity, followed by Canada with 27% (table 3). About 97% of talc exports was milled. Mexico (32%) and Canada (27%) were the leading destinations for milled talc. Belgium (79%) was the leading destination for unmilled talc.

U.S. talc imports increased by 14% to 325,000 t valued at \$109 million in 2012 from 285,000 t valued at \$77.1 million in 2011. By tonnage, Pakistan was the leading source for imported talc, accounting for 41% of the tonnage; followed by Canada, 25%; China, 17%; and Italy, 7% (table 4). Shipments from Pakistan were likely to have included talc from Afghanistan, which shipped its talc through Karachi. One importing company in the United States appears to have accounted for more than 50% of the talc imports from Pakistan in 2011 and 2012. A significant portion of those imports probably went into stocks, given the modest growth of talc markets in 2012. Much of the imported tonnage from Japan was likely pyrophyllite rather than talc. About 83% of talc imports was milled; 9% was milled; and 8% was cut or sawed. China and Hong Kong were the source of 91% of the unmilled talc imports in 2012. Pakistan, Canada, China, and Italy accounted for 48%, 24%, 13%, and 8%, respectively, of milled talc imports. Canada accounted for 62% of cut or sawed talc imports.

## World Review

World production of talc and pyrophyllite was estimated to be 7.43 Mt in 2012, a slight decrease from 7.50 Mt in 2011. China was the world's leading producer of talc, followed by, in decreasing order of quantity, India, the United States, Finland, and France (crude). The Republic of Korea was the leading producer of pyrophyllite, followed by Brazil, Japan, and Thailand. Brazil, China, Finland, France, India, Japan, the Republic of Korea, Thailand, and the United States together produced 79% of the world's talc and pyrophyllite (table 5).

Although worldwide sales of talc for paper use declined in 2012, paper markets continued to be the leading global use for talc with 34% of the tonnage. Polymer markets were the second leading market with 23% of sales, helped by the growth in the automotive plastics sector in the past few years. The polymer market was followed by ceramics, 15%; paint, 12%; and miscellaneous, 16% (Industrial Minerals, 2013).

**Afghanistan.**—Afghanistan has emerged as a new supplier of talc to the world, despite on-going armed conflicts in the country. The talc was mined in Nangarhar Province, in the Khogyani and Shinwari Districts. The deposits were composed of more than 97% talc in the active mining areas. Production of crude talc ore was estimated to be about 200,000 to 300,000 metric tons per year with most exported via Pakistan (Wilson, 2012).

**Canada.**—Globex Mining Enterprises Inc. continued developmental work on its magnesite and talc deposit in Timmins, Quebec, Canada. The company was drilling additional cores to better determine its resources (Globex Mining Enterprises Inc., 2012).

**China.**—China was the leading producer of talc with an output of more than 2.0 Mt. The country also was the leading exporter of talc with more than 680,000 t exported annually. More than 200 companies mined talc in China but about 10 companies accounted for 80% of production. Production remained unchanged from 2009 to 2011 but exports and the price of exported talc increased (Xiuzhuang, 2012).

## Outlook

Following a 23% decline in sales from 2008 to 2009, sales increased by 12% between 2009 and 2012. Markets served by talc and pyrophyllite, including automobiles and other vehicles; paints, coatings, and adhesives; and plastics and rubber products, increased their output in 2012 (U.S. Census Bureau, 2013b). This is the second year in a row with positive growth in these industry sectors and suggests that sales of talc used in catalytic converter bodies (ceramics), automotive and truck body and underhood components (plastics), paint and coatings (fillers and extenders), and plastics and rubber (fillers and extenders in plastic products, tires, and other rubber components) may continue to increase in 2013. Increased commercial and residential construction in the United States in 2011 and 2012 suggests that sales of talc into such markets as adhesives, caulks, ceramics (particularly ceramic tile), joint compounds, architectural paint, and roofing, may increase in 2013. Sales of pyrophyllite also may increase slightly in 2013 as the economy recovers.

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## GENERAL SOURCES OF INFORMATION

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TABLE 1  
SALIENT TALC AND PYROPHYLLITE STATISTICS<sup>1</sup>

(Thousand metric tons and thousand dollars)

	2008	2009	2010	2011	2012
<b>United States:</b>					
Mine production, crude:					
Quantity:					
Talc	706	511	604	616	515
Pyrophyllite	W	W	W	W	W
Value:					
Talc	21,800	14,600	19,100	21,800	17,100
Pyrophyllite	W	W	W	W	W
Sold by producers, crude and processed:					
Quantity:					
Talc	667	512	567	567	575
Pyrophyllite	W	W	W	W	W
Value:					
Talc	83,300	57,200	84,900	87,700	87,200
Pyrophyllite	W	W	W	W	W
Exports, talc: <sup>2</sup>					
Quantity	244	188	240	223 <sup>r</sup>	251
Value	46,000	37,600	54,300	52,700 <sup>r</sup>	56,100
Imports for consumption, talc:					
Quantity	193	134	242	285 <sup>r</sup>	325
Value	56,400	47,900	67,100	77,100 <sup>r</sup>	109,000
Apparent consumption <sup>3</sup>	655	457	606	678 <sup>r</sup>	589
World, production	7,800 <sup>r</sup>	7,320 <sup>r</sup>	7,310 <sup>r</sup>	7,500 <sup>r,e</sup>	7,430 <sup>e</sup>

<sup>e</sup>Estimated. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Excludes powder—talcum (in package), face, and compact.

<sup>3</sup>Production plus imports minus exports plus adjustments in Government and industry stocks.

TABLE 2  
END USES FOR TALC PRODUCED IN THE UNITED STATES<sup>1</sup>

(Thousand metric tons)

	2011	2012
Ceramics <sup>2</sup>	118	116
Cosmetics	17	15
Paint	92	89
Paper	92	101
Plastics	40	37
Roofing	41	42
Rubber	13	14
Other <sup>3</sup>	48	49
Total	461	463

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes tile.

<sup>3</sup>Includes art sculpture, construction caulks, insecticides, joint compound, and other uses not specified.

TABLE 3  
U.S. EXPORTS OF TALC<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Country	2011		2012	
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>
Belgium	2	842	9	2,730
Brazil	8	1,770	10	2,210
Canada <sup>4</sup>	61	12,500	67	12,300
Chile	7	3,270	7	3,090
China	7	2,420	9	2,260
France	3	512	7	753
Japan	4	1,250	7	1,300
Mexico	80 <sup>r</sup>	14,800 <sup>r</sup>	78	14,600
Singapore	9	2,910	11	3,170
Other <sup>5</sup>	41	12,500	47	13,700
Total	223 <sup>r</sup>	52,700 <sup>r</sup>	251	56,100

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Excludes powders—talcum (in package), face, and compact.

<sup>3</sup>Free alongside ship.

<sup>4</sup>Probably includes shipments in transit through Canadian ports.

<sup>5</sup>Includes 54 countries in 2011 and 54 countries in 2012.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF TALC, BY COUNTRY<sup>1</sup>

Country	Not crushed or powdered		Crushed or powdered		Cut and sawed		Total unmanufactured	
	Quantity (metric tons)	Value <sup>2</sup> (thousands)	Quantity (metric tons)	Value <sup>2</sup> (thousands)	Quantity (metric tons)	Value <sup>2</sup> (thousands)	Quantity (metric tons)	Value <sup>2</sup> (thousands)
2011:								
Brazil	--	--	211	61	1,570	1,910	1,780	1,970
Canada	17	24	61,100	21,300	15,500	14,500	76,700	35,800
China	42,800	8,820	80,500	13,000	716	954	124,000	22,700
France	--	--	2,660	445	--	--	2,660	445
Italy	--	--	803	838	44	65	847	904
Japan	--	--	5,180	2,080	45	194	5,230	2,280
Pakistan	220	121	46,000	7,760	--	--	46,200	7,880
Other <sup>3</sup>	10,700 <sup>r</sup>	2,180 <sup>r</sup>	16,600 <sup>r</sup>	755 <sup>r</sup>	611	2,070	28,000 <sup>r</sup>	5,010 <sup>r</sup>
Total	53,700	11,100	213,000 <sup>r</sup>	46,200 <sup>r</sup>	18,500	19,700	285,000 <sup>r</sup>	77,100 <sup>r</sup>
2012:								
Brazil	38	71	91	27	1,460	1,830	1,590	1,920
Canada	36	77	64,000	26,800	16,000	14,900	80,000	41,800
China	15,500	5,230	34,300	8,820	5,090	5,980	55,000	20,000
France	--	--	2,090	529	5	23	2,090	552
Italy	--	--	22,200	5,220	--	--	22,200	5,220
Japan	--	--	2,800	2,240	82	332	2,890	2,570
Pakistan	2,200	4,470	131,000	21,500	--	--	133,000	25,900
Other <sup>3</sup>	10,800	3,530	14,600	2,860	3,090	4,990	28,500	11,400
Total	28,600	13,400	271,000	67,900	25,700	28,100	325,000	109,000

<sup>r</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>U.S. Customs declared value.

<sup>3</sup>Includes 32 countries in 2011 and 34 countries in 2012.

Source: U.S. Census Bureau.



TABLE 5  
TALC AND PYROPHYLLITE: WORLD PRODUCTION, BY COUNTRY AND PRODUCT<sup>1,2</sup>

(Metric tons)

Country <sup>3</sup>	2008	2009	2010	2011 <sup>c</sup>	2012 <sup>c</sup>
Argentina, talc and related materials	22,200	22,800	24,800	24,400 <sup>r,4</sup>	22,000
Australia: <sup>e,5</sup>					
Pyrophyllite	1,200	1,200	1,200	1,200	1,200
Talc	100,000 <sup>r</sup>	100,000 <sup>r</sup>	100,000 <sup>r</sup>	120,000	130,000
Austria, soapstone and talc, crude	155,000	111,000	138,000	132,000 <sup>r,4</sup>	135,000
Bhutan, talc	56,100	64,400	26,300	26,000 <sup>r</sup>	26,000
Brazil, talc and pyrophyllite	513,000	544,000 <sup>r</sup>	507,000 <sup>r</sup>	540,000 <sup>r,4</sup>	550,000
Canada, pyrophyllite, soapstone, talc	70,000 <sup>c</sup>	44,000	96,000	147,000	154,000 <sup>p</sup>
Chile, talc	2,110	1,200	1,360	349 <sup>r,4</sup>	350
China, unspecified <sup>c</sup>	2,200,000	2,300,000	2,000,000	2,200,000	2,200,000
Egypt, pyrophyllite, soapstone, steatite, talc	69,000	44,000 <sup>c</sup>	12,900 <sup>r</sup>	48,000 <sup>r</sup>	45,000
Finland, talc	528,000 <sup>r</sup>	375,000 <sup>r</sup>	419,000 <sup>r</sup>	429,000 <sup>r,4</sup>	440,000
France, talc, crude <sup>c</sup>	420,000	420,000	420,000	420,000	420,000
Guatemala, talc	1,030	6,360	2,180	8,190 <sup>r,4</sup>	5,000
Hungary, talc	--	--	--	--	--
India: <sup>c</sup>					
Pyrophyllite	87,000	88,000	90,000	90,000	92,000
Steatite	560,000	550,000	550,000	560,000	570,000
Iran, talc <sup>6</sup>	89,100	66,400	95,800 <sup>r</sup>	90,000	90,000
Italy, steatite and talc <sup>c</sup>	140,000	140,000	140,000	140,000	140,000
Japan: <sup>c</sup>					
Pyrophyllite	350,000	340,000	340,000	350,000	340,000
Talc	26,000	25,000	24,000	24,000	25,000
Korea, North, unspecified <sup>c</sup>	50,000	50,000	50,000	50,000	50,000
Korea, Republic of:					
Pyrophyllite	893,000	617,000	674,000	511,000 <sup>r,4</sup>	500,000
Talc	6,440	6,000	5,730	15,600 <sup>r,4</sup>	15,000
Macedonia, talc	977	682 <sup>r</sup>	1,290 <sup>r</sup>	547 <sup>r,4</sup>	550
Mexico, talc	17,600	33,400	870	51,200 <sup>r,4</sup>	51,000
Morocco <sup>c</sup>	2,000	2,000	2,000	2,000	2,000
Nepal, talc <sup>7</sup>	8,000	6,600	9,000 <sup>c</sup>	9,000 <sup>r</sup>	8,000
Norway, soapstone, steatite, talc <sup>c</sup>	28,000	28,000	26,000	25,000	20,000
Pakistan, pyrophyllite	26,000	40,800 <sup>r</sup>	122,000 <sup>r</sup>	100,000 <sup>r</sup>	110,000
Paraguay, pyrophyllite, soapstone, talc <sup>c</sup>	200	200	200	200	200
Peru, talc	18,000	13,400	13,300	17,800 <sup>4</sup>	31,600 <sup>4</sup>
Portugal, talc	11,200	11,600	12,000	12,000	12,000
Romania, talc <sup>c</sup>	1,700	500	1,000	1,000	1,000
Russia, talc <sup>c</sup>	160,000	160,000	160,000	160,000	160,000
South Africa:					
Pyrophyllite	80,700	115,000	123,000	121,000 <sup>r,4</sup>	120,000
Talc	5,150	4,720	3,150	4,450 <sup>r,4</sup>	4,400
Spain, steatite and talc <sup>c</sup>	100,000	100,000	100,000	100,000	100,000
Sweden, soapstone and talc <sup>c</sup>	14,000	14,000	14,000	14,000	14,000
Thailand: <sup>c</sup>					
Pyrophyllite	107,000 <sup>4</sup>	200,000	200,000	200,000	200,000
Talc	3,260 <sup>4</sup>	3,000	3,000	3,000	3,000
Turkey, talc and pyrophyllite	162,000 <sup>r</sup>	147,000 <sup>r</sup>	194,000 <sup>r</sup>	125,000 <sup>r,4</sup>	125,000
United Kingdom, pyrophyllite, soapstone, talc <sup>c</sup>	6,000	6,000	6,000	6,000	6,000
United States:					
Pyrophyllite	W	W	W	W	W
Talc	706,000	511,000	604,000	616,000 <sup>4</sup>	515,000 <sup>4</sup>
Uruguay, pyrophyllite, soapstone, talc <sup>c</sup>	1,150	1,150	1,150	1,150	1,150

See footnotes at end of table.



TABLE 5—Continued  
TALC AND PYROPHYLLITE: WORLD PRODUCTION, BY COUNTRY AND PRODUCT<sup>1,2</sup>

(Metric tons)

Country <sup>3</sup>	2008	2009	2010	2011 <sup>e</sup>	2012 <sup>e</sup>
Zimbabwe, talc <sup>e</sup>	200	200	--	--	--
Grand total	7,800,000 <sup>r</sup>	7,320,000 <sup>r</sup>	7,310,000 <sup>r</sup>	7,500,000 <sup>r</sup>	7,430,000
Of which:					
Pyrophyllite	1,540,000	1,400,000 <sup>r</sup>	1,550,000 <sup>r</sup>	1,370,000 <sup>r</sup>	1,360,000
Steatite	560,000	550,000	550,000	560,000	570,000
Talc	2,160,000 <sup>r</sup>	1,810,000 <sup>r</sup>	1,900,000 <sup>r</sup>	2,010,000 <sup>r</sup>	1,940,000
Unspecified	3,530,000 <sup>r</sup>	3,550,000 <sup>r</sup>	3,310,000 <sup>r</sup>	3,550,000 <sup>r</sup>	3,560,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; not included in "Total." -- Zero.

<sup>1</sup>World totals, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Table includes data available through May 7, 2013.

<sup>3</sup>In addition to the countries listed, Afghanistan and Nigeria may produce talc, but information is inadequate to estimate output.

<sup>4</sup>Reported figure.

<sup>5</sup>Data based on fiscal year ending June 30 of year stated.

<sup>6</sup>Data based on fiscal year beginning March 21 of year stated.

<sup>7</sup>Data based on fiscal year beginning mid-July of year stated.