GEMSTONES[1]

(Data in million dollars, unless otherwise noted)

Domestic Production and Use: Total U.S. gemstone output has decreased in recent years because of declining foreign demand for freshwater shell, a major component of the domestic industry. Domestic gemstone production also included amber, agates, beryls, coral, garnet, jade, jasper, pearl, opal, quartz, sapphire, topaz, turquoise, and many other gem materials. Output of natural gemstones was primarily from Arizona, Arkansas, California, Nevada, Oregon, and Tennessee. Reported output of synthetic gemstones was from six firms in Arizona, California, Michigan, North Carolina, and New York. There was notable production of turquoise in Arizona; beryl in Maine; sapphire in Montana; opal in Nevada; ruby in North Carolina; and freshwater pearl in Tennessee. Major uses were jewelry, carvings, and gem/mineral collections.

Salient Statistics—United States:	**1994**	**1995**	**1996**	**1997**	**1998[e]**
Production:[2] Natural[3]	50.5	48.7	43.6	25.0	23.0
Synthetic	22.2	26.0	24.0	21.6	30.0
Imports for consumption	6,440	6,540	7,240	8,380	9,600
Exports, including reexports[4]	2,240	2,520	2,660	2,760	2,600
Consumption, apparent[5]	4,270	4,100	4,650	5,670	7,100
Price	Variable, depending on size, type, and quality				
Employment, mine, number[e]	1,200	1,200	1,200	1,200	1,200
Net import reliance[6] as a percent of apparent consumption	99	98	98	99	99

Recycling: Insignificant.

Import Sources (1994-97 by value): Israel, 34%; Belgium, 22%; India, 21%; and other, 23%. Diamond imports accounted for 91% of the total value of gem imports.

Tariff: Item	**Number**	**Normal Trade Relations (NTR) 12/31/98**	**Non-NTR[7] 12/31/98**
Diamonds, unworked or sawn	7102.31.0000	Free	Free.
Diamond, ½ carat or less	7102.39.0010	Free	10% ad val.
Diamond, cut, more than ½ carat	7102.39.0050	Free	10% ad val.
Precious stones, unworked	7103.10.2000	Free	Free.
Precious stones, simply sawn	7103.10.4000	12.6% ad val.	50% ad val.
Rubies, cut	7103.91.0010	Free	10% ad val.
Sapphires, cut	7103.91.0020	Free	10% ad val.
Emeralds, cut	7103.91.0030	Free	10% ad val.
Other precious stones, cut but not set	7103.99.1000	0.4% ad val.	10% ad val.
Other precious stones, misc.	7103.99.5000	12.6% ad val.	50% ad val.
Imitation precious stones	7018.10.2000	0.6% ad val.	20% ad val.
Synthetic stones, cut but not set	7104.90.1000	0.6% ad val.	10% ad val.
Pearls, natural	7101.10.0000	Free	10% ad val.
Pearls, cultured	7101.21.0000	0.4% ad val.	10 % ad val.
Pearls, imitation not strung	7018.10.1000	4.8% ad val	60% ad val.

Depletion Allowance: 14% (Domestic), 14% (Foreign).

Government Stockpile: The National Defense Stockpile (NDS) does not contain an inventory of gemstones per se. However, portions of the industrial diamond inventory are of near-gem or gem quality. Additionally, the beryl and quartz inventories contain some gem-quality materials, and the inventory of synthetic ruby and sapphire could be used by the gem industry. The U.S. Department of Defense is currently selling some NDS materials that may be of gemstone quality.

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GEMSTONES

Events, Trends, and Issues: A Colorado diamond mine, the only commercial U.S. diamond producer in almost a century, was offered for sale in 1998. Canada's first commercial diamond mine was opened in 1998. The mine may account for about 5% of global output when fully operational. Additional Canadian mines are scheduled to open in the next few years and may increase national output to 15% of world production.

As the world's leading gem market, accounting for at least one-third of world demand and reaching sales totaling $6 billion, the United States is expected to dominate global gemstone consumption well into the next millennium. Synthetic gemstones will gain a larger share of domestic jewelry sales. China may emerge as a major new gem market in the next decade.

World Mine Production,[8] Reserves, and Reserve Base:

	Mine production		Reserves and reserve base[9]
	1997	1998[e]	
United States	(10)	(10)	World reserves and reserve base of gem diamond are substantial. No reserves or reserve base data are available for other gemstones.
Angola	1,110	1,000	
Australia	18,100	18,500	
Botswana	13,000	13,000	
Brazil	300	300	
Central African Republic	400	400	
China	230	230	
Congo (Kinshasa)[11]	2,500	2,500	
Namibia	1,500	1,500	
Russia	9,550	10,000	
South Africa	4,380	4,500	
Venezuela	350	350	
Other countries	780	750	
World total (may be rounded)	52,200	53,000	

World Resources: Natural gem-quality diamonds are among the world's rarest mineral materials. Most diamond-bearing ore bodies have a diamond content that ranges from less than 1 carat per ton to only about 6 carats per ton. The major gem diamond reserves are in southern Africa, Russia, and Western Australia; Canadian resources may prove to be significant as well. Estimation of a reserve base is difficult to determine because of the changing economic evaluation of near-gem materials and recent discoveries in Australia, Canada, and Russia.

Substitutes: Plastics, glass, and other materials are substituted for natural gemstones. Synthetic gemstones (manufactured materials that have the same chemical and physical properties as gemstones) are common substitutes. Simulants (materials that appear to be gems, but differ in chemical and physical characteristics) also are frequently substituted for natural gemstones.

[e]Estimated.

[1]Excludes industrial diamond and garnet. See Diamond (Industrial) and Garnet (Industrial).

[2]Estimated minimum production.

[3]Includes production of freshwater shell.

[4]Reexports account for more than 90% of the totals.

[5]If reexports are not considered, apparent consumption would be significantly greater.

[6]Defined as imports - exports/reexports + adjustments for Government and industry stock changes.

[7]See Appendix B.

[8]Data in thousands of carats of gem diamond.

[9]See Appendix D for definitions.

[10]Less than ½ unit.

[11]Formerly Zaire.