SALT

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: Domestic production of salt was adequate in 2006. The total value was estimated to be more than $1 billion. Twenty-nine companies operated 64 plants in 15 States. The estimated percentage of salt sold or used, by type, was salt in brine, 46%; rock salt, 39%; vacuum pan, 8%; and solar salt, 7%.

The chemical industry consumed nearly 39% of total salt sales, with salt in brine representing about 90% of the type of salt used for feedstock. The chlorine and caustic soda manufacturing sector was the main consumer within the chemical industry. Salt for highway deicing accounted for 37% of U.S. demand. The remaining markets for salt, in declining order, were distributors, 8%; industrial, 7%; agricultural, 3%; food, 3%; water treatment, 2%; and other combined with exports, 1%.

Salient Statistics—United States:[1]	**2002**	**2003**	**2004**	**2005**	**2006**[e]
Production	40,300	43,700	46,500	45,100	46,000
Sold or used by producers	37,700	41,100	45,000	45,000	46,700
Imports for consumption	8,160	12,900	11,900	12,100	10,000
Exports	689	718	1,110	879	1,000
Consumption:					
Reported	43,600	50,200	50,700	53,100	55,700
Apparent	45,100	53,200	55,800	56,200	55,700
Price, average value of bulk, pellets and packaged salt, dollars per ton, f.o.b. mine and plant:					
Vacuum and open pan salt	120.02	124.24	128.39	128.39	145.00
Solar salt	53.93	53.42	49.25	49.25	52.00
Rock salt	21.62	23.11	25.83	25.83	23.00
Salt in brine	5.89	7.21	7.01	7.01	8.00
Stocks, producer, yearend[e, 2]	NA	NA	NA	NA	NA
Employment, mine and plant, number	4,100	4,100	4,100	4,100	4,100
Net import reliance[3] as a percentage of apparent consumption	17	17	23	20	16

Recycling: None.

Import Sources (2002-05): Canada, 36%; Chile, 29%; The Bahamas, 9%; Mexico, 9%; and other, 17%.

Tariff: Item	Number	Normal Trade Relations 12-31-06
Iodized salt	2501.00.0000	Free.

Depletion Allowance: 10% (Domestic and foreign).

Government Stockpile: None.

Prepared by **Dennis S. Kostick [(703) 648-7715, dkostick@usgs.gov, fax: (703) 648-7757]**

SALT

Events, Trends, and Issues: The rising demand for salt in Asia prompted some salt producers to increase production capacity. China, which had relied on imports from India to satisfy its salt requirements, increased production capacity by an additional 6 million tons. In Australia, the world's leading solar salt exporter spent $11 million to raise annual capacity at Lake McLeod by 500,000 tons, bringing total company annual capacity to more than 9 million tons. Another company contemplated constructing a new 3-million-ton-per-year solar salt operation in Yanarrie, Australia. In North America, the company that operates the world's largest underground rock salt mine at Goderich, Ontario, Canada, increased annual capacity by 750,000 tons; that raised the mine's total annual capacity to 7.25 million tons.

By October, water surface temperatures and jet stream patterns over the Pacific Ocean created weak El Niño conditions that reportedly indicated that the winter of 2006-07 was expected to be mild throughout the United States. The warmer winter would result in reduced rock salt consumption for highway deicing. Salt inventories throughout many regions of the country were adequate to handle most snow and ice emergencies.

Domestic consumption of salt in 2006 is expected to be similar to that of 2005. No shortage of rock salt is anticipated for the winter of 2006-07.

World Production, Reserves, and Reserve Base:

	Production		Reserves and reserve base[4]
	2005	2006[e]	
United States[1]	45,100	46,000	Large. Economic and subeconomic deposits of salt are substantial in principal salt-producing countries. The oceans contain a virtually inexhaustible supply of salt.
Australia	12,384	12,400	
Brazil	6,660	7,300	
Canada	14,500	15,000	
Chile	4,940	6,100	
China	44,547	48,000	
Egypt	2,400	2,400	
France	7,000	7,000	
Germany	18,672	18,600	
India	15,503	16,000	
Iran	2,000	2,000	
Italy	3,600	3,600	
Mexico	9,242	8,500	
Netherlands	5,000	5,000	
Poland	5,000	5,000	
Romania	2,445	2,500	
Russia	2,800	2,800	
Spain	3,200	3,200	
Turkey	2,200	2,200	
Ukraine	2,300	2,400	
United Kingdom	5,800	5,800	
Other countries	22,700	18,000	
World total (rounded)	238,000	240,000	

World Resources: World continental resources of salt are practically unlimited, and the salt content in the oceans is virtually inexhaustible. Domestic resources of rock salt and salt from brine are in the Northeast, Central Western, and southern Gulf Coast States. Saline lakes and solar evaporation salt facilities are near populated regions in the Western United States. Almost every country in the world has salt deposits or solar evaporation operations of various sizes.

Substitutes: There are no economic substitutes or alternates for salt. Calcium chloride and calcium magnesium acetate, hydrochloric acid, and potassium chloride can be substituted for salt in deicing, certain chemical processes, and food flavoring, but at a higher cost.

[e]Estimated. NA Not available.
[1]Excludes Puerto Rico production.
[2]Reported stock data are incomplete. For apparent consumption and net import reliance calculations, changes in annual stock totals are assumed to be the difference between salt produced and salt sold or used.
[3]Defined as imports – exports + adjustments for Government and industry stock changes.
[4]See Appendix C for definitions.