

SALT

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: Domestic production of salt increased an estimated 3% in 2004. The total value was estimated to be \$1.2 billion. Twenty-nine companies operated 64 plants in 15 States. The estimated percentage of salt sold or used, by type, was salt in brine, 45%; rock salt, 39%; vacuum pan, 9%; and solar salt, 7%.

The chemical industry consumed nearly 40% of total salt sales, with salt in brine representing about 89% 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, 6%; food, 4%; agricultural, 3%; water treatment, 2%; and other combined with exports, less than 1%.

Salient Statistics—United States: ¹	2000	2001	2002	2003	2004^e
Production	45,600	44,800	40,300	43,700	45,100
Sold or used by producers	43,300	42,200	37,700	41,100	42,900
Imports for consumption	8,960	12,900	8,160	12,900	11,000
Exports	642	1,120	689	718	800
Consumption:					
Reported	54,000	48,700	43,600	50,200	53,900
Apparent	51,600	54,000	45,100	53,200	53,900
Price, average value of bulk, pellets and packaged salt, dollars per ton, f.o.b. mine and plant:					
Vacuum and open pan salt	113.95	120.02	120.02	124.24	122.00
Solar salt	50.46	52.33	53.93	53.42	55.00
Rock salt	20.67	21.84	21.62	23.11	24.00
Salt in brine	5.70	6.26	5.89	7.21	7.00
Stocks, producer, yearend ^{e, 2}	2,300	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	16	22	17	23	20

Recycling: None.

Import Sources (2000-03): Canada, 44%; Chile, 20%; Mexico, 10%; The Bahamas, 9%; and other, 17%.

Tariff:	Item	Number	Normal Trade Relations
			12-31-04
	Iodized salt	2501.00.0000	Free.

Depletion Allowance: 10% (Domestic and foreign).

Government Stockpile: None.

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Events, Trends, and Issues: High sodium and chloride levels in water supplies have affected various parts of the country. In Massachusetts, the State Highway Department announced that it would reduce the quantity of salt applied to several of the roads during the winter. Liquid calcium chloride will be applied to road surfaces before a storm arrives to prevent snow from adhering to the pavement, thereby reducing the need to apply salt later. A mixture of salt and sand, instead of 100% salt, would be used in heavy storms.

Although China has abundant resources of salt, there was a shortage of salt supplies in the country that caused imports of salt to increase. A surge in industrial projects in China caused the demand for salt to grow greater than the domestic supply could accommodate. This increase in demand prompted plans to construct a new solar salt operation in Western Australia, which if constructed, could satisfy some of the salt shortages in China.

Domestic consumption of salt in 2005 is expected to be lower than that of 2004. The proposed closure of some solar salt capacity in California will reduce domestic production, but overall supplies, especially those from imports, should meet any unanticipated increase in demand.

World Production, Reserves, and Reserve Base:

	Production		Reserves and reserve base ⁴
	2003	2004 ^e	
United States ¹	43,700	45,100	Large. Economic and subeconomic deposits of salt are substantial in principal salt-producing countries. The oceans contain an inexhaustible supply of salt.
Australia	9,800	10,000	
Brazil	6,100	6,100	
Canada	13,300	13,300	
China	32,400	34,000	
France	7,000	7,000	
Germany	15,700	16,000	
India	15,000	15,000	
Italy	3,600	3,600	
Mexico	8,000	8,000	
Poland	1,500	2,000	
Russia	2,800	3,000	
Spain	3,200	3,200	
Ukraine	2,300	2,500	
United Kingdom	5,800	5,800	
Other countries	<u>39,800</u>	<u>40,000</u>	
World total (rounded)	210,000	215,000	

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.

^eEstimated. NA Not applicable.

¹Excludes Puerto Rico production.

²Reported 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.

³Defined as imports – exports + adjustments for Government and industry stock changes.

⁴See [Appendix C](#) for definitions.