

## SALT

(Data in thousand metric tons unless otherwise noted)

**Domestic Production and Use:** Domestic production of salt increased by 9% in 2014 to 44.1 million tons. The total value was estimated to be about \$2.2 billion. Twenty-eight companies operated 61 plants in 16 States. Five of the seven leading States were, in descending order of total salt sold or used, Louisiana with 33%; Texas, 18%; New York, 17%; Kansas, 6%; and Utah, 5%. Ohio and Michigan were among the top seven leading States in total salt sold or used but their rankings are withheld to protect proprietary data. The estimated percentage of salt sold or used was, by type, rock salt, 42%; salt in brine, 40%; vacuum pan, 10%; and solar salt, 8%.

Highway deicing consumed about 43% of total salt. The chemical industry accounted for about 38% of total salt sales with salt in brine accounting for 91% of the salt used for chemical feedstock. The chlorine and caustic soda manufacturing sector was the main consumer within the chemical industry. The remaining markets for salt were, in declining order, distributors, 8%; food processing, 4%; agricultural, 3%; general industrial, 2%; and other uses combined with exports and primary water treatment, 1% each.

<b>Salient Statistics—United States:</b> <sup>1</sup>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014<sup>e</sup></b>
Production	43,300	45,000	37,200	40,300	44,100
Sold or used by producers	43,500	45,500	34,900	43,400	44,500
Imports for consumption	12,900	13,800	9,880	11,900	18,000
Exports	595	846	809	525	850
Consumption:					
Reported	48,600	48,000	36,900	47,600	54,000
Apparent <sup>2</sup>	55,800	58,500	44,000	54,800	61,600
Price, average value of bulk, pellets and packaged salt, dollars per ton, f.o.b. mine and plant:					
Vacuum and open pan salt	180.08	174.00	169.93	178.65	180.00
Solar salt	57.41	51.19	71.87	81.36	83.00
Rock salt	35.67	38.29	36.89	47.24	55.00
Salt in brine	7.49	8.14	8.44	8.49	8.50
Employment, mine and plant, number <sup>e</sup>	4,100	4,100	4,100	4,100	4,200
Net import reliance <sup>3</sup> as a percentage of apparent consumption	24	22	22	21	28

**Recycling:** None.

**Import Sources (2010–13):** Canada, 38%; Chile, 36%; Mexico, 11%; The Bahamas, 5%; and other, 10%.

<b>Tariff: Item</b>	<b>Number</b>	<b>Normal Trade Relations</b>
Salt (sodium chloride)	2501.00.0000	<b>12–31–14</b> Free.

**Depletion Allowance:** 10% (Domestic and foreign).

**Government Stockpile:** None.

**Events, Trends, and Issues:** The 2013–14 winter was colder than the 2012–13 winter, and the amount of frozen precipitation and the number of winter weather events were above normal in many parts of the United States, requiring more salt for highway deicing. Rock salt production and imports in 2014 increased significantly from the levels in 2013 because many municipalities and local and State transportation departments reported low levels of rock salt inventories at the end of the last winter season. Many contracts between salt suppliers and consumers require that the customer take delivery of at least 80 percent of its order, and because of the greatly increased demand for deicing salt, many buyers were experiencing double-digit percentage increases in rock salt prices in these contracts. Salt purchasers without contracts are subject to substantial spikes in pricing if they require an emergency salt allocation.

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The majority of local and State governments in cold regions reportedly had stockpiled some supplies of rock salt for the winter of 2014–15, but many had less than was typical and some were struggling to find supplies even as winter weather arrived early in many parts of the United States. The National Oceanic and Atmospheric Administration predicted that the likelihood of a repeat of the previous harsh winter was unlikely. The forecast for the traditional snowbelt in the northern tier of the United States was uncertain, with an above- or below-average winter equally likely. However, the southern part of the United States was expected to be cooler than average, and the West and New England were likely to be warmer than average. It was anticipated that the domestic salt industry would be able to provide adequate salt supplies from domestic and foreign sources for emergency use in the event of adverse winter weather.

### World Production and Reserves:

	Production		Reserves <sup>4</sup>
	2013	2014 <sup>e</sup>	
United States <sup>1</sup>	40,300	44,100	Large. Economic and subeconomic deposits of salt are substantial in principal salt-producing countries. The oceans contain a virtually inexhaustible supply of salt.
Australia	11,000	11,000	
Brazil	7,500	7,500	
Canada	12,200	13,300	
Chile	6,580	8,000	
China	70,000	71,000	
France	6,100	6,000	
Germany	11,900	12,000	
India	16,000	17,000	
Mexico	10,800	9,500	
Poland	4,430	4,400	
Spain	4,440	4,500	
Turkey	5,300	5,400	
Ukraine	6,200	5,400	
United Kingdom	6,700	6,800	
Other countries	<u>42,200</u>	<u>43,400</u>	
World total (rounded)	262,000	269,000	

**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 primarily in the States of Kansas, Louisiana, Michigan, New York, Ohio, and Texas. Saline lakes and solar evaporation salt facilities are in the States of Arizona, California, Nevada, New Mexico, Oklahoma, and Utah. Almost every country in the world has salt deposits or solar evaporation operations of various sizes.

**Substitutes:** No economic substitutes or alternatives for salt exist in most applications. 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.

<sup>e</sup>Estimated.

<sup>1</sup>Excludes production from Puerto Rico.

<sup>2</sup>Defined as sold or used by producers + imports – exports.

<sup>3</sup>Defined as imports – exports.

<sup>4</sup>See [Appendix C](#) for resource/reserve definitions and information concerning data sources.